This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

1895.] CITY DOCUMENT. [No. 20.

FORTY-NINTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1895.

THE NEW YORK PUBLIC LIBRARY
P 72353
ASTOR, LENOX AND TILDEN FOUNDATIONS

The Providence Press:
Snow & Farnham, City Printers,
at Custom House Street.
1895.

Digitized by Google

Digitized by Google

FORTY-NINTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1895.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1895.

Digitized by Google

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., April 1, 1895.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-ninth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same for the quarter ending March 31, 1895:

WATER WORKS.

The average daily consumption of water during the last quarter was 9,127,860 gallons.

Water pipes were laid during the quarter, as follows:

8-INCH.	
In Ernest street	2,083.29 feet.
6-INCH.	
In Lilac street	29.57 feet.
Total	2,112.86 feet,

or .400 + miles.

Water pipes were removed during the quarter, as follows:

6-INCH.	
In Old Highway Yard	528.83 feet,

or .100 + miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

Digitized by Google

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	80,854.77 feet.
10-inch	14,653.13 feet.
8-inch	242,524.35 feet.
6-inch	1,008,624.98 feet,
Total	1,503,057.71 feet.

or 284.670+ miles.

Two fire hydrants have been set during the quarter, one in each of the following locations:

Cypress street, south-east corner of Knowles street.
Ernest street, north-west corner of Allens avenue.

The total number of fire hydrants is now sixteen hundred and fifty-four: fifteen hundred and ninety-eight flush and fifty-six post hydrants.

During the quarter two hundred and nine water meters were set, of which number seven were to replace other meters.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,097	628	148	33	6	.....	.....	.....	3,912
Ball & Fitts, rotary	.....	.....	22	19	2	3	2	.....	48
Crown	6,394	673	177	84	23	11	11	.....	7,373
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Thomson	1,603	255	57	43	17	5	4	4	1,988
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	2	1	.....	.....	1	.....	1	.....	5
	11,124	1,557	405	179	49	19	18	4	13,355

Digitized by Google

Ninety-eight plumbers' licenses have been issued during the quarter, all of which expire December 31, 1895.

Six hundred and twenty permits to do plumbing work were issued during the quarter.

Twenty-four applications for water were made during the quarter, making the total number March 31, 1895, twenty thousand, two hundred and forty-eight.

The number of new service stops opened during the quarter was sixty-five.

The total number of service stops opened to March 31, 1895, inclusive, was nineteen thousand, five hundred and eighty-five. The number in actual use March 31, 1895, was eighteen thousand, one hundred and thirty-nine.

The amount of bills approved on account of water works from January 1 to March 31, 1895, inclusive, was :

For construction and extension, . . . $22,966 33

Classified as follows :

Cast iron water pipe	$10,137 60
Fire hydrants, boxes and covers	5,801 90
Stop valves	1,486 86
Keeper's house, Fruit Hill Reservoir	1,254 78
Special castings	1,017 87
Laying water pipe	713 56
Taps and stops	707 11
Laying service pipe	649 50
Labor on and carting pipe	403 67
Wharf salaries	195 00
Tools	178 33
Experimental tests of water filtration	148 03
Horses, wagons, harnesses, etc	139 33
Barn expenses	132 79
	$22,966 33

Digitized by Google

For maintenance, ... $21,932 54

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$1,777 68	
Sundries	823 11	
Engineers	797 00	
Firemen	633 55	
Cornish engine house	612 38	
Superintendence	299 00	
Lights	145 36	
Labor on fuel	68 25	
Barn expenses	56 48	
Oil, waste and packing	54 18	
Corliss pumping engine and house	20 70	
Real estate	14 25	
Care of grounds	9 75	
Worthington pumping engine	1 35	
		$5,313 04

SOCKANOSSET RESERVOIR.

Watchman	$182 00	
Sundries	99 40	
		281 40

HOPE PUMPING STATION.

Coal and wood	$930 00	
Engineers	575 25	
Firemen	418 60	
Lights	86 48	
Hope pumping engine, No. 2	77 99	
Oil, waste and packing	45 95	
Sundries	35 57	
Hope pumping engine, No. 1	5 55	
		2,175 39

HOPE RESERVOIR.

Watchman	$204 75	
Sundries	1 00	
		205 75

FRUIT HILL RESERVOIR.

Watchman	$204 75	
Sundries	141 56	
		346 31
Amount carried forward		$8,321 89

Digitized by Google

Amount brought forward		$8,321 89

PIPE LINE AND SERVICE STOPS.

Repairs	$2,221 03	
Superintendence—salaries	867 75	
		3,088 78

METER DEPARTMENT.

Water meters	$4,215 83	
Setting and repairing meters	1,722 23	
		5,938 06

MISCELLANEOUS.

Clerks' and inspectors' salaries	$2,990 22	
Thawing services, etc.	609 18	
Prevention of defilement of the Pawtuxet	410 92	
Barn expenses	252 36	
Horses, wagons, harnesses, etc.	132 27	
Analyses of water	90 00	
Sundries	77 56	
Pipe yard, office expenses	21 30	
		4,583 81
		$21,932 54

The amount of expenditures from January 1 to March 31, 1895, inclusive, was . $44,898 87

The total expenditures to March 31, 1895, inclusive, were $8,075,004 10

The *net* expenditure for construction and extension from January 1 to March 31, 1895, inclusive, was	$22,370 06
The *net* expenditure for construction and extension to March 31, 1895, inclusive, was	$6,089,387 23
The *net* expenditure for maintenance from January 1 to March 31, 1895, inclusive, was	$16,475 01
The *net* expenditure for maintenance to March 31, 1895, inclusive, was	$1,250,126 09

Digitized by Google

Bills deposited with the city treasurer for collection from January 1 to March 31, 1895, inclusive, amounted to $317,988 05

As follows:

Water	$311,309 77
Water meters	3,824 75
Setting and repairing meters	1,802 75
Penalties	194 00
Rent of real estate	150 50
Permanently closing service stops	20 00
Repairs on pipe line	7 76
Labor and material, laying service pipes, etc	563 39
Use of hoisting engine	13 13
Manure from barn	12 00
	$317,988 05

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $315,140 91

As follows:

Water	$308,891 11
Water meters	3,885 20
Setting and repairing meters	1,385 65
Penalties	196 00
Rent of real estate	150 50
Permanently closing service stops	20 00
Repairs on pipe line	16 18
Labor and material, laying service pipes, etc	571 14
Use of hoisting engine	13 13
Manure from barn	12 00
	$315,140 91

SEWERS.

During the quarter ending March 31, 1895, one hundred and eight permits were issued to drain layers: fifty-six for new work and fifty-two for extension and repairs of drains.

Forty-four drain layers' licenses were issued during the quarter, all of which expire December 31, 1895.

Digitized by Google

March 8th, the offer of New England Steam Brick Company to furnish and deliver the sewer brick required for the sewer in South Water street and across the river to Allens avenue, for the improved sewerage system, was accepted.

March 23d, the offer of New England Steam Brick Company to furnish and deliver the smooth-cut brick required for Section 16, Siphon Division, of the improved sewerage system was accepted.

During the quarter assessments for the cost of construct ing sewers were certified to the city treasurer, as follows:

Rutland street	$438 13
Salisbury street	827 28
Union avenue	5,131 62
Prairie avenue	2,247 38
Staniford street	1,960 67
Whitmarsh and Broad streets	2,039 58
Howard and Perry streets, Broadway and Eden street	7,436 95
Harris avenue	3,466 00
Perry and Howard streets	1,363 06
South Angell and East River streets	6,556 37
Atlantic avenue	3,674 83
Gesler street	1,401 21
Meeting street	508 43
Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets	20,235 55
Benevolent street	1,518 83
Ives street	568 56
Violet street	974 54
Medway street	1,270 56
Orchard and Fruit streets	2,074 48
Total	$63,694 03

January 17th, contracts for the construction of the following sections of the improved sewerage system were awarded and subsequently executed, as follows:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

Digitized by Google

TO FREDERICK E. SHAW.

No. of resolution.	Date of approval.		
406.	July 15, 1889,	*Section 4, Disposal Division, Foundations,*	$38,176 00

TO GEORGE R. NEWMAN & CO.

No. of resolution.	Date of approval.		
521.	Sept. 25, 1894,	*Section 15, Siphon Division.* . . .	$22,613 55
521.	" " "	*Section 18, Moshassuck River Division,*	$57,443 75

TO CHARLES A. HASKIN.

No. of resolution.	Date of approval.		
521.	Sept. 25, 1894,	*Section 16, Siphon Division,*	$36,155 00

TO EDWARD W. EVERSON.

No. of resolution.	Date of approval.		
521.	Sept. 25, 1894,	*Section 17, Moshassuck River Division,*	$54,397 50

March 19th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

TO GEORGE R. NEWMAN & CO.

No. of resolution.	Date of approval.		
616.	Nov. 20, 1894,	*Barton street from Broadway to Westminster street,* . .	$680 65
617.	" " "	*Brattle street, from Waldo to Lilac,* . .	$219 18

Digitized by Google

No. of resolution.	Date of approval.				
619.	Nov.	20,	1894,	*Pomona avenue, from Academy to Pemberton street,* . . .	$486 31
84.	Feb.	23,	1895,	*Hendrick street from Carleton to Academy avenue,*	$1,123 42
85.	"	"	"	*Marlborough and Frank streets,* . .	$935 82
87.	"	"	"	*Taylor street and Reynolds avenue,* .	$818.35
96.	"	27,	"	*Willow, Ellery, Hudson and Wood streets,*	$2,105 55

To William H. Sherman.

No. of resolution.	Date of approval.				
59.	Feb.	19,	1895,	*Plum street, from Oxford to Fruit,* . .	$278 30
83.	"	23,	"	*Cranston street, from Potters avenue to Huntington,* . . .	$538 50

To Timothy F. Lyons.

No. of resolution.	Date of approval.				
82.	Feb.	23,	1895,	*Bolander street, from Grand View to Abbott,*	$25 00

To Frederick E. Shaw.

No. of resolution.	Date of approval.				
86.	Feb.	23,	1895,	*Shawmut street, from Orms to Chalkstone avenue,*	$698 20

During the quarter the construction of the following sewers was completed, namely:

Digitized by Google

No. of resolution.	Date of approval.				Date of completion.
138.	Mar.	21,	1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*	Jan. 19, 1895.
567.	Oct.	19,	1894,	*Eddy and Broad streets,* . .	Jan. 14, 1895.

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
406.	July	15,	1889,	*Section* 4, *Disposal Division.*
564.	Sept.	23,	1893,	*Section* 10, *Allens avenue Division.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced March 31, 1895, namely:

No. of resolution.	Date of approval.			
521.	Sept.	25,	1894,	*Canal and South Water streets, etc., Improved Sewerage System.*
616.	Nov.	20,	"	*Barton street, from Broadway to Westminster street.*
617.	"	"	"	*Brattle street, from Waldo to Lilac.*
619.	"	"	"	*Pomona avenue, from Academy to Pemberton street.*
59.	Feb.	19,	1895,	*Plum street from Oxford to Fruit.*
82.	"	23,	"	*Bolander street, from Grand View to Abbott.*
83.	"	"	"	*Cranston street, from Potters avenue to Huntington.*
84.	"	"	"	*Hendrick street, from Carleton to Academy avenue.*
85.	"	"	"	*Marlborough and Frank streets.*

Digitized by Google

No. of resolution.	Date of approval.	
86.	Feb. 23, 1895,	*Shawmut street, from Orms to Chalkstone avenue.*
87.	" " "	*Taylor street and Reynolds avenue.*
96.	" 27, "	*Willow, Ellery, Hudson and Wood streets.*

The amount of bills approved on account of sewers from January 1 to March 31, 1895, inclusive, was:

FOR CONSTRUCTION:

Regular appropriation	$6,367 70	
Improved sewerage appropriation	48,686 68	
		$55,054 38

Charged as follows:

Contract reservations	$5,220 00
Material	3,569 97
Salaries of assistant engineers	2,695 75
Clerks' salaries	925 08
Sundries, improved sewerage system	812 42
Testing cement	223 05
Sundries	204 00
Tools	61
Sewer in Abbott street, from Camp to Knowles	9 30
Sewer in Eddy and Broad streets	1,607 50
Sewer in Allens avenue Division, Section 10	11,042 78
Sewer in Allens avenue Division, Section 11	25 00
Sewer in Norfolk and Station streets	3,159 73
Sewer in Siphon Division, Section 15	85 94
Sewer in Siphon Divison, Section 16	32 60
Sewer in Woonasquatucket river Division, Section 14	145 37
Foundation for sewage pumping station	140 00
Grading Norfolk street, from Oak to Cranston	1,988 28
Holly sewage pumping engines	23,167 00
	$55,054 38

For maintenance, ... $7,414 23

Charged as follows:

Cleaning basins and sewers	$2,564 42
Removing buildings to new city yard	974 33
Amount carried forward	$3,538 75

Digitized by Google

Amount brought forward	$3,538 75	
Inspection of connections	790 16	
Repairing of basins and sewers	600 12	
Cleaning and repairing old drains	539 93	
Tools	504 88	
Horses, wagons, harnesses, etc	453 88	
Salary, superintendent	390 00	
Barn expenses	371 53	
Filling cisterns, etc	120 59	
Cleaning private connections	57 00	
Sundries	47 39	
		$7,414 23

The *net* expenditure for construction of sewers to March 31, 1895, inclusive, was $5,045,141 23

The *net* expenditure for maintenance of sewers to March 31, 1895, inclusive, was $442,783 03

Bills deposited with the city treasurer for collection from January 1 to March 31, 1895, inclusive, amounted to $1,315 50

As follows:

Cleaning private connections	$114 70
Filling cisterns, etc	87 57
Laying private drain	4 25
Old manhole frame and cover	2 75
Sewer material	1,105 23
Testing cement	1 00
	$1,315 50

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $1,295 60

As follows:

Cleaning private connections	$94 80
Filling cisterns, etc	87 57
Laying private drain	4 25
Old manhole frame and cover	2 75
Sewer material	1,105 23
Testing cement	1 00
	$1,295 60

Digitized by Google

HIGHWAYS.

Three permits to open streets were issued during the quarter.

February 16th, the offer of the Smithfield Granite Company to furnish and deliver 50,000 granite paving blocks was accepted.

March 5th, the offer of John Garvey to furnish and deliver 30,000 granite paving blocks was accepted.

March 9th, the offer of Beaton Brothers to furnish and deliver 30,000 granite paving blocks was accepted.

March 23d, the proposal of Beaton Brothers, of Coventry Center, to furnish and deliver

300 pieces circular curbing, 10 feet radius,
200 pieces circular curbing, 8 feet radius,
4,000 lineal feet 14-inch crosswalk stone,
50 curb corners, 2 feet radius,

was accepted and a contract was subsequently executed.

March 25th, the offer of Charles S. Bush Co. to enstall electrical work in the new city barn, corner Eddy and Henderson streets, was accepted.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows:

Adelphi avenue, from Taber to Elmgrove	$534 07
Congress avenue, from Melrose street to Elmwood avenue	1,093 74
Huntington avenue, from Cranston street to Jackson avenue	1,631 23
Mitchell street, from Broad to Melrose	2,095 52
Oriole avenue, from Butler to Grand	659 89
Redwing street, from Elmwood avenue to the land of the N. Y., N. H. & H. R. R. Co	417 20
Rutland street, from Elmwood avenue to Bucklin street	420 44
Staniford street, from Blackstone to Willard avenue	407 61
Union avenue, from Messer street to the city line	2,998 65
Admiral street, from Whipple to Mowry	2,996 78
Atlantic avenue, from Melrose street to Hamilton	726 29
Camp street, from Evergreen to Rochambeau avenue	922 21
Canton street, from Regent avenue to Chalkstone	1,463 88
Carleton street, from Beaufort to Chalkstone avenue	1,030 70
Amount carried forward	$17,398 21

Digitized by Google

Amount brought forward	$17,398 21
Elton street, from Elmgrove avenue to Wayland	618 00
Helme street, from Harris avenue to Valley street	796 40
Huntington avenue, from McDonough street to Union avenue	2,879 84
Melrose street, from Adelaide avenue to Irving street	670 77
Preston street, from Ives to Gano	823 83
Rochambeau avenue, from Olney street to Blackstone boulevard	724 20
America street, from Africa to Atwells avenue	241 04
Arnold street, from Hope to Brook	520 18
Carrington avenue, from Camp street to East avenue	1,179 81
Cedar street, from Brayton avenue to Acorn street	1,394 09
Congdon street, from Halsey to the north side of Hidden	363 63
Dale street, from Atwells avenue to West Exchange street	379 45
Jewett street, from Senter to its westerly termination	757 21
Senter street, from Smith to West Park	622 98
Swan street, from Plain to Eddy	624 69
Tremont street, from Charles to Ashburton	205 13
Winslow street, from Weybosset to Broad	477 55
Bergen street, from Regent avenue to Chalkstone	1,375 60
Howard street, from Westminster to Broadway	789 50
Promenade street, from Gaspee to railroad abutments	1,048 88
Total	$33,820 99

The following work was in progress March 31, 1895, viz.:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.

Sept. 20, 1894, *Althea street, from Dexter to Cranston* :—roadway graded.

Oct. 18, 1894, *Eden street, from Broadway to Bell street* :—curbing nearly set.

TO TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.

Sept. 7, 1893, *Harris avenue, from Acorn street to Kinsley avenue* :—nearly completed.

TO GRADE.

No. of resolution. Date of approval.

50. Jan. 19, 1894, *Norfolk street, from Oak to Cranston* :—in process.

Digitized by Google

To Build Barn, Set up Stone Crusher, Etc.

No. of resolution.	Date of approval.	
467.	Aug. 6, 1894,	*City Yard, Henderson street:*— in process.

To Bring to Sub-Grade and Put in Good Condition.

518.	Sept. 25, 1894,	*New York avenue, from Eddy street to Maryland avenue.*
518.	" " "	*Indiana avenue, from Eddy street to Maryland avenue.*
518.	" " "	*Ohio avenue, from Eddy street to Maryland avenue.*
518.	" " "	*California avenue, from Eddy street to Maryland avenue.*
518.	" " "	*Vermont avenue, from Eddy street to Maryland avenue.*
518.	" " "	*Washington avenue, from Broad street to Maryland avenue.*
518.	" " "	*Massachusetts avenue, from Broad street to Maryland avenue.*
518.	" " "	*Virginia avenue, from New York avenue to Montgomery avenue.*
518.	" " "	*Maryland avenue, from New York avenue to Massachusetts avenue.*

The following work, ordered by the board of aldermen and city council, had not commenced March 31, 1895, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 20, 1894,	*Charles street, from Ledge to Hagan.*
" " "	*Forest street, from Camp to Ivy.*
" " "	*South street, from Eddy to the river.*
Oct. 18, "	*Ellery street, from Wendell to Chapin avenue.*

Digitized by Google

Date of order.			
Oct.	18,	1894,	*Wendell street, from Messer to Ellery.*
"	"	"	*Willow street, from Messer to Ellery.*
Nov.	15,	"	*Abbott street, from Knowles to Camp.*
Dec.	20,	"	*Alma street, from Candace to Pekin.*
"	"	"	*Atlantic avenue, from Elmwood to Melrose street.*
"	"	"	*Evergreen street, from Camp to North Main.*
"	"	"	*Gordon avenue, from Public street to Oxford.*
"	"	"	*Hudson street, from Ellery to Huntington avenue.*
"	"	"	*Kossuth street, from Bowdoin to Putnam.*
"	"	"	*Taylor street, from Glenham to Chester avenue.*
Jan.	17,	1895,	*Fruit street, from Broad to Gordon avenue.*
"	"	"	*Oakland street, from Elmwood avenue to Public street.*
"	"	"	*Orchard street, from Oxford to Fruit.*
Feb.	21,	"	*Burrington street from Crocker avenue to Pacific.*

To Take Possession and Remove Obstructions.

Oct. 18, 1894, *Washington street, from Eddy to Walker.*

To be Brought to Grade.

Oct. 18, 1894, *Hudson street, from Ellery to Huntington avenue.*

To Put in Good Condition.

March 22, 1895, *Sims avenue, from Harris to Kinsley.*

Digitized by Google

To be Repaired.

Date of order.	
March 21, 1895,	*Maryland avenue, from Massachusetts avenue to the city line.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
516.	Sept. 25, 1894,	*Richmond street, from Ship to Point.*
614.	Nov. 20, "	*Traverse street, from Wickenden to Pike.*

To Concrete Sidewalks.

620.	Nov. 20, 1894,	*Doyle avenue, from Camp street to Olney.*
620.	" " "	*Camp street, west side, from Olney to Rochambeau avenue.*

Bills approved on account of highways from January 1 to March 31, 1895, inclusive, amounted to:

Regular appropriation	$41,340 78	
Special appropriation	4,893 51	
Special credit appropriation	329 55	
		$46,563 84

Classified as follows:

Crushed stone—material and labor	$9,501 44
New brick barn—to build	7,819 51
Tools, implements, etc	5,476 37
Cleaning streets	4,977 90
Removing stone crusher and highway buildings to new city yard	3,360 13
Removing snow and ice	2,688 95
Barn expenses	2,250 83
Screening gravel	1,343 18
Transfer to reservation fund for account of Pine street	1,026 00
Blacksmith and wheelright shop	960 21
Amount carried forward	$39,404 52

Digitized by Google

Amount brought forward	$39,404 52	
Salaries—superintendent and clerks	741 00	
Labor on materials	674 69	
Repairs on paved streets	412 75	
Steam rollers—repairs and supplies	371 84	
Watchman at city yard	204 75	
Repairs on unpaved streets	143 55	
Repairs on stone crushers	89 93	
Office expenses—city yard	62 48	
Horses, wagons, harnesses, etc	56 83	
Sundries	50 95	
Telephone lines	18 79	
Building driveways, etc	17 70	
		$42,249 78

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Admiral street, from Whipple to Mowry	$235 62	
Eden street, from Broadway to Bell street	6 30	
South street, from Eddy to the river	350 45	
		592 37

Pave with Granite Blocks.

East and Wickenden streets		3,106 89

To be Brought to Grade.

Abbott street, from Camp to Knowles		168 25

To Grade and Put in Good Condition.

California avenue, from Eddy street to Maryland avenue	$28 45	
Maryland avenue, from New York to Massachusetts	277 85	
Vermont avenue, from Eddy street to Maryland avenue	23 25	
		329 55

Take Possession, Grade and Put in Good Condition.

Harris avenue, from Acorn street to Kinsley avenue		117 00
		$46,563 84

Digitized by Google

Bills deposited with the city treasurer for collection from January 1 to March 31, 1895, inclusive, amounted to $163 94

As follows:

Labor and materials	$98 94
Manure from barn	62 00
Sprinkling snow on Reservoir avenue	2 00
Hauling lunch wagon to city yard	1 00
	$163 94

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $234 25

As follows:

Labor and materials	$109 25
Manure from barn	62 00
Use of steam roller	60 00
Sprinkling snow on Reservoir avenue	2 00
Hauling lunch wagon to city yard	1 00
	$234 25

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from January 1 to March 31, 1895, inclusive, amounted (for granite curbing) to . . $5 40

Curbing bills deposited with the city treasurer for collection from January 1 to March 31, 1895, inclusive, amounted to $31,224 76

During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to $6,828 48

Digitized by Google

CITY ENGINEER.

Bills approved on account of the city engineer's department from January 1 to March 31, 1895, inclusive, amounted to $12,049 87

Charged as follows:

Salary, city engineeer	$1,500 00
Salaries of assistants	9,337 83
Salaries of clerks	763 75
Car fares	233 60
Supplies—drawing materials, etc.	151 64
Instruments and repairs	38 25
Meteorological instruments and repairs	15 00
Sundries	9 80
	$12,049 87

Bills deposited with the city treasurer for collection from January 1 to March 31, 1895, inclusive, amounted to $14 33

As follows:

Sewer diagrams	$12 00
Tracing cloth, etc.	1 33
Steel tape	1 00
	$14 33

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $14 33

As follows:

Sewer diagrams	$12 00
Tracing cloth, etc.	1 33
Steel tape	1 00
	$14 33

Digitized by Google

BRIDGES.

February 9th, the offer of J. A. Dailey & Son to remove the old Red bridge structure over the Seekonk river was accepted.

Feb. 27th, the offer of L. Sweet & Co. to furnish lumber for new shop at city yard, corner of Henderson and Eddy streets, was accepted.

March 12th, the proposal of the Union Bridge Company, of New York, for the steel superstructure of the new Central bridge over the Seekonk river was accepted and a contract was subsequently executed. Amount, $34,841.90.

March 21st, the proposal of Everson & Liddle to build the piers of the Washington Row bridge over the Providence river was accepted and a contract was subsequently executed. Amount, $13,131.00.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894,	*New City Yard, Henderson street:* —to grade and fence.
511.	Sept. 25, "	*Red bridge, over the Seekonk river.*

The following work had not commenced March 31, 1895, namely:

No. of resolution.	Date of approval.	
831.	Dec. 20, 1892,	*Oak street foot-bridge, over railroad tracks.*
89.	Feb. 26, 1895,	*Washington Row bridge.*

Bills approved on account of bridges from January 1 to March 31, 1895, inclusive, amounted to $4,693 24

Digitized by Google

Charged as follows:

Barn expenses	$93 00
Branch avenue bridge	2 25
Building at city yard	5 23
Central or Red bridge	83 84
Exchange bridge	1 50
Geneva bridge	7 05
Hawkins street bridge	2 24
Horses, wagons, harnesses, etc	63 87
Lumber, hardware, etc	11 55
Point street bridge	145 13
Removing bridge shop to new city yard	1,319 45
Rent of keeper's house, Washington bridge	60 00
Salaries—Central or Red bridge	402 50
Salaries—Point street bridge	991 50
Salaries—Washington bridge	482 54
Smith street bridge	18 69
Smithfield avenue bridge	2 55
Sundries	92 01
Tar bridge—Manton avenue	75
Tools	58 12
Wanskuck bridge	1 50
Washington bridge, near India Point	840 62
West River street bridge	75
Weybosset bridge	6 60
	$4,693 24

Bills approved for the construction of the new Red bridge, from January 1 to March 31, 1895, inclusive, have been paid from the special appropriation for that work, to the amount of . $4,136 08

FILLING COVE BASIN.

Bills approved and paid from the appropriation for filling the cove basin, from January 1 to March 31, 1895, inclusive, amounted to . . $215 16

Charged as follows:

Transfer to reservation fund for account of Gaspee street	$210 00
Gaspee street, from Cove to Promenade	5 16
	$215 16

Digitized by Google

CONTINGENCIES.

Bills approved from January 1 to March 31, 1895, inclusive, for grading and fencing new city yard, Henderson street, have been paid from the appropriation for contingencies to the amount of $4,437 91

ROBERT E. SMITH,

Commissioner.

Digitized by Google

Digitized by Google

FIFTIETH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1895.

72354

The Providence Press:
snow & farnham, city printers,
13 Custom House Street.
1895.

Digitized by Google

Digitized by Google

FIFTIETH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1895.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1895.

Digitized by Google

72354

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., July 1, 1895.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fiftieth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same for the quarter ending June 30, 1895:

WATER WORKS.

June 5th, the offer of John R. White & Son to furnish and deliver four hundred tons anthracite coal at Hope Pumping Station, was accepted.

June 29th, the offer of R. B. Little & Co. to furnish and deliver coal at Pettaconset Pumping Station, was accepted.

The average daily consumption of water during the last quarter was 8,657,236 gallons.

Water pipes were laid during the quarter, as follows:

12-INCH.	
In Harris avenue	1,365.11 feet.
8-INCH.	
In Francis, Hawkins and Promenade streets, Elmhurst and Taber avenues; in School street and Allen's avenue, town of Cranston; and in Smith street and High Service avenue, town of North Providence	1,230.87 feet.
Amount carried forward	2,595.98 feet.

Digitized by Google

Amount brought forward	2,595.98 feet.

6-INCH.

In Broadway, Alma, Althea, Bell, Dye, Eaton, Edith, Faith, Federal, Forest, Fruit, Glover, Hamlin, Hathaway, Hawkins, Hilton, Jones, Kossuth, Longmont, Planet, Promenade, Railroad, Sabin, Stillman, Taylor, Van Zandt and Vinton streets, Academy, Andrews, California, Doyle, Elmhurst, Indiana, Lexington, Pacific, Reynolds and Vermont avenues and in new highway yard; in Lawrence, Pioneer and School streets, town of Johnston; in Asia, Garden, Ridge and School streets, Arnold, Cleveland, Garfield, Princess and Whipple avenues, town of Cranston; in Fair street, town of Warwick; and in High Service avenue, town of North Providence	21,166.26 feet.
Total	23,762.24 feet.

or 4.500 + miles.

Water pipes were removed or abandoned during the quarter, as follows:

6-INCH.

In Battey, Shepard and Tobey streets, and in old city yard	681.95 feet.

or .129 + miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	82,219.88 feet.
10-inch	14,653.13 feet.
8-inch	243,755.22 feet.
6-inch	1,029,109.29 feet.
Total	1,526,138.00 feet.

or 289.041 + miles.

Fifteen fire hydrants have been set during the quarter, one in each of the following locations:

Benedict street, Cranston, east side, opposite Cato street.
Broadway, south side, opposite east line of Bradford street.
Broadway, southeast corner of Vinton street.

Digitized by Google

Broadway, southwest corner of Tobey street.
Brook street, Cranston, east side, 308 feet south of Plainfield street.
Eaton street, north side, opposite Elmhurst street.
Francis street, east side, opposite south line of Railroad street.
Glover street, north side, easterly corner of Kimball street.
Hathaway street, north side, at the end of the line near N. Y., N. H. & H. R. R. tracks.
Lilac street, northeast corner of Dexter street.
Longmont street, north side, northwest corner of Yorkshire street.
Promenade street, north side, west of railroad bridge.
School street, Johnston, north side, about 270 feet east of Trenton street.
Stillman street, east side, about 133 feet north of Promenade street.
Van Zandt street, north side, about 120 feet east of Jackson avenue.

One fire hydrant was removed from the old highway yard.

The total number of fire hydrants is now sixteen hundred and sixty-eight — sixteen hundred and ten flush and fifty-eight post hydrants.

During the quarter two hundred and twenty-six water meters were set, of which number twenty-two were to replace other meters. The use of eleven meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,097	625	147	33	6	.....	.....	.....	3,908
Ball & Fitts, rotary	.....	.....	22	19	2	3	2	.....	48
Crown	6,486	674	177	84	23	11	11	.....	7,466
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Thomson	1,684	267	60	47	20	5	5	4	2,092
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	2	1	.....	.....	1	.....	1	.....	5
	11,297	1,567	407	183	52	19	19	4	13,548

Digitized by Google

Six plumbers' licenses were issued during the quarter, making the total number one hundred and four, all of which expire December 31, 1895.

Eleven hundred and sixteen permits to do plumbing work were issued during the quarter.

Three hundred and thirty-six applications for water were made during the quarter, making the total number June 30, 1895, twenty thousand, five hundred and eighty-four.

The number of new service stops opened during the quarter was two hundred and forty-six.

The total number of service stops opened to June 30, 1895, inclusive, was nineteen thousand, eight hundred and thirty-one. The number in actual use June 30, 1895, was eighteen thousand, four hundred and fifty-three.

The amount of bills approved on account of water works from April 1 to June 30, 1895, inclusive, was :

For construction and extension, . . . $10,273 15

Classified as follows :

Laying water pipe	$5,170 87
Keeper's house, Fruit Hill reservoir	1,333 45
Laying service pipe	1,323 20
Taps and stops	445 68
Horses, wagons, harnesses, etc	414 40
Tools	392 75
Special castings	385 42
Labor on and carting pipe	361 29
Wharf salaries	195 00
Barn expenses	169 51
Cast iron water pipe	42 09
Stop valves	25 00
Worthington high duty pumping engine	14 40
	$10,273 15

Digitized by Google

For maintenance, ... $21,412 08

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,705 42	
Sundries	691 50	
Firemen	523 60	
Engineers	518 05	
Superintendence	299 00	
Cornish engine house	247 64	
Lights	160 54	
Care of grounds	130 49	
Oil, waste and packing	71 71	
Barn expenses	58 82	
Real estate	53 85	
Labor on fuel	29 55	
Worthington high duty pumping engine	7 21	
Corliss pumping engine and house	1 05	
		$5,498 43

SOCKANOSSET RESERVOIR.

Sundries	$251 37	
Watchman	182 00	
		433 37

HOPE PUMPING STATION.

Engineers	$575 25	
Firemen	420 35	
Care of grounds	296 42	
Sundries	165 64	
Hope pumping engine, No. 1	78 86	
Lights	65 09	
Hope pumping engine, No. 2	7 55	
Oil, waste and packing	5 31	
		1,614 47

HOPE RESERVOIR.

Sundries	$332 92	
Watchman	204 75	
		537 67

FRUIT HILL RESERVOIR.

Sundries	$648 92	
Watchman	204 75	
		853 67

Amount carried forward $8,937 61

Digitized by Google

Amount brought forward		$8,937 61

PIPE LINE AND SERVICE STOPS.

Repairs	$2,145 20	
Superintendence—salaries	883 75	
		3,028 95

METER DEPARTMENT.

Water meters	$3,931 75	
Setting and repairing meters	1,669 01	
		5,600 76

MISCELLANEOUS.

Clerks' and inspectors' salaries	$2,966 91	
Prevention of defilement of the Pawtuxet	396 79	
Barn expenses	283 41	
Analyses of water	90 00	
Sundries	45 95	
Horses, wagons, harnesses, etc	29 39	
Real estate at Pawtuxet	17 50	
Pipe yard, office expenses	10 81	
Telephone lines	4 00	
		3,844 76
		$21,412 08

The amount of expenditures from April 1 to June 30, 1895, inclusive, was . . $31,685 23

The total expenditures to June 30, 1895, inclusive, were $8,106,689 33

The *net* expenditure for construction and extension from April 1 to June 30, 1895, inclusive, was	$9,520 83
The *net* expenditure for construction and extension to June 30, 1895, inclusive, was	$6,098,908 06
The *net* expenditure for maintenance from April 1 to June 30, 1895, inclusive, was	$13,554 25
The *net* expenditure for maintenance to June 30, 1895, inclusive, was	$1,263,680 34

Bills deposited with the city treasurer for collection from April 1 to June 30, 1895, inclusive, amounted to $59,903 64

Digitized by Google

As follows :

Water	$51,609 97
Water meters	4,920 75
Setting and repairing meters	2,346 35
Rent of real estate	48 75
Hay at Sockanosset reservoir	40 00
Permanently closing service stops	30 00
Penalties	28 00
Examination and repairs of pipe line	14 00
Labor and material, laying service pipes, etc	746 82
Use of hoisting engine	119 00
	$59,903 64

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $60,243 18

As follows :

Water	$51,607 03
Water meters	4,943 75
Setting and repairing meters	2,698 90
Rent of real estate	168 00
Permanently closing service stops	30 00
Penalties	26 00
Examination and repairs of pipe line	17 18
Labor and material, laying service pipes, etc	633 32
Use of hoisting engine	119 00
	$60,243 18

SEWERS.

During the quarter ending June 30, 1895, four hundred and eighty-three permits were issued to drain layers—three hundred and sixty for new work and one hundred and twenty-three for extension and repairs of drains.

Six drain layers' licenses were issued during the quarter, making the total number fifty, all of which expire December 31, 1895.

Digitized by Google

June 6th, the offer of New England Steam Brick Co. to furnish and deliver 82,000 smooth-cut brick for section 4, improved sewerage system, was accepted.

June 14th, the offer of Timothy F. Lyons to lay drains from the sewer to inside the curb line of Broadway, from Aborn street to Barton street, was accepted.

During the quarter assessments of the cost of constructing sewers were certified to the city treasurer, as follows:

Althea street	$5,070 25
Evergreen and Forest streets	5,279 74
Wendell and Ellery streets	2,534 38
Butler avenue	1,486 28
Stewart street	418 50
Abbott street	1,330 02
Eddy and Broad streets	6,555 25
Academy avenue	4,911 56
Total	$27,585 98

June 5th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To William H. Sherman.

No. of resolution.	Date of approval.				
207.	May	4,	1895,	*Autumn street, from Eddy to Rugby,*	$352 40
208.	"	"	"	*Chambers street, from Potter's avenue to Huntington,*	503 29
211.	"	"	"	*Lexington avenue, from Niagara street to Hamilton,*	514 35
212.	"	"	"	*Linwood avenue, from Cranston street to Union avenue,*	1,181 31

Digitized by Google

TO GEORGE R. NEWMAN & CO.

No. of resolution.	Date of approval.				
209.	May	4,	1895,	*Gay street, from Willard avenue to Robinson street,* . .	$174 41
210.	"	"	"	*Harris and Sims avenues,*	2,625 01

TO TIMOTHY F. LYONS.

No. of resolution.	Date of approval.				
213.	May	4,	1895,	*Rhodes street and Allen's avenue,* . .	$1,656 82

June 13th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

TO GEORGE R. NEWMAN & CO.

No. of resolution.	Date of approval.				
274.	June	7,	1895,	*Acorn street and Harris avenue,* . . .	$1,340 90

June 18th, contracts for building the following sewers were awarded and subsequently executed, namely:

TO TIMOTHY F. LYONS.

No. of resolution.	Date of approval.				
275.	June	7,	1895,	*Broadway, from Marshall street to Almy,*	$122 59
276.	"	"	"	*Hewes street, from present end of sewer, northerly,* . . .	129 08

June 24th, a contract for building the following sewer was awarded and subsequently executed, namely:

Digitized by Google

To George R. Newman & Co.

No. of resolution.	Date of approval.		
287.	June 18, 1895,	*Lillian avenue, from Broad street to Baxter,*	$702 40

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
616.	Nov. 20, 1894,	*Barton street, from Broadway to Westminster street,* . .	May 6, 1895.
617.	" " "	*Brattle street, from Waldo to Lilac,* . .	May 29, 1895.
619.	" " "	*Pomona avenue, from Academy to Pemberton street,* . . .	June 19, 1895.
59.	Feb. 19, 1895,	*Plum street, from Oxford to Fruit,* . .	April 24, 1895.
82.	" 23, "	*Bolander street, from Grand View to Abbott,*	May 14, 1895.
83.	" " "	*Cranston street, from Potter's avenue to Huntington,* . . .	April 19, 1895.
85.	" " "	*Marlborough and Frank streets,* . .	May 27, 1895.
86.	" " "	*Shawmut street, from Orms to Chalkstone avenue,*	May 28, 1895.
87.	" " "	*Taylor street and Reynolds avenue,* .	May 17, 1895.
96.	" 27, "	*Willow, Ellery, Hudson and Wood streets,*	April 30, 1895.

Digitized by Google

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
406.	July	15,	1889,	*Section* 4, *Disposal Division.*
564.	Sept.	23,	1893,	*Section* 10, *Allen's avenue Division.*
521.	"	25,	1894,	*Section* 15, *Siphon Division.*
521.	"	"	"	*Section* 16, *Siphon Division.*
521.	"	"	"	*Section* 17, *Moshassuck River Division.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
84.	Feb.	23,	1895.	*Hendrick street, from Carleton to Academy avenue.*
210.	May	4,	"	*Harris and Sims avenues.*
212.	"	"	"	*Linwood avenue, from Cranston street to Union avenue.*
276.	June	7,	"	*Hewes street, from present end of sewer, northerly.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced June 30, 1895, namely:

No. of resolution.	Date of approval.			
521.	Sept.	25,	1894,	*Section* 18, *Moshassuck River Division.*
207.	May	4,	1895,	*Autumn street, from Eddy to Rugby.*
208.	"	"	"	*Chambers street, from Potter's avenue to Huntington.*
209.	"	"	"	*Gay street, from Willard avenue to Robinson street.*
[illegible]	"	"	"	*Lexington avenue, from Niagara street to Hamilton.*
[illegible]				*Rhodes street and Allen's avenue.*

Digitized by Google

No. of resolution.	Date of approval.			
274.	June	7,	1895,	*Acorn street and Harris avenue.*
275.	"	"	"	*Broadway, from Marshall street to Almy.*
287.	"	18,	"	*Lillian avenue, from Broad street to Baxter.*
301.	"	21,	"	*McKinley street, from Roger Williams Park to Elmwood avenue.*
322.	"	27,	"	*Public street, from Plain to Eddy.*
323.	"	"	"	*Whitney street, from Alger to Elmwood avenue.*

The amount of bills approved on account of sewers from April 1 to June 30, 1895, inclusive, was:

FOR CONSTRUCTION:

Regular appropriation	$19,344 24	
Improved sewerage system	164,977 25	
		$184,321 49

Charged as follows:

Material	$12,437 36
Contract reservations	4,200 00
Salaries of assistant engineers	2,817 75
Clerks' salaries	925 08
Sundries, improved sewerage system	678 79
Additional catch-basins	636 57
Testing cement	430 76
Sundries	75 00
Laying drains to curbstones	42 48
Tools	23 74
Sewer in Barton street, from Broadway to Westminster street	596 56
Sewer in Bolander street, from Grand View to Abbott	1,863 12
Sewer in Brattle street, from Waldo to Lilac	194 47
Sewer in Cranston street, from Potter's avenue to Huntington	576 04
Sewer in Harris and Sims avenues	787 51
Sewer in Hendrick street, from Carlton to Academy avenue	1,555 61
Amount carried forward	$27,840 84

Digitized by Google

Amount brought forward	$27,840 84
Sewer in Hewes street, from end of present sewer opposite Stampers street, about 120 feet northerly	17 07
Sewer in Linwood avenue from Cranston street to Union avenue	725 60
Sewer in Marlborough and Frank streets	945 90
Sewer in Plum street, from Oxford to Fruit	283 73
Sewer in Pomona avenue, from Academy to Pemberton street	555 20
Sewer in Shawmut street, from Orms to Chalkstone avenue	661 72
Sewer in Taylor street and Reynolds avenue	1,087 37
Sewer in Willow, Ellery, Hudson and Wood streets.	3,008 27
Sewer in Allen's avenue Division, Section 10	13,733 08
Sewer in Moshassuck river Division, Section 17	28,119 61
Sewer in Moshassuck river Division, Section 18	11 67
Sewer in Norfolk and Station streets	236 94
Sewer in Siphon Division, Section 15	19,648 73
Sewer in Siphon Division, Section 16	25,352 64
Construction of waterway for brook through Rathbone street sewer	497 54
Foundation for sewage pumping station	23,140 26
Grading Norfolk street, from Oak to Cranston	2,725 28
Holly sewage pumping engines	35,730 04
	$184,321 49

For maintenance, ... $7,860 15

Charged as follows:

Cleaning basins and sewers	$3,364 95
Repairing basins and sewers	1,364 05
Inspection of connections	771 16
Tools	674 39
Cleaning and repairing old drains	471 33
Barn expenses	453 95
Salary, superintendent	390 00
Sundries	167 32
Horses, wagons, harnesses, etc	120 28
Cleaning private connections	48 70
Removing buildings to new city yard	31 39
Filling cisterns, etc	2 63
	$7,860 15

The *net* expenditure for construction of sewers to June 30, 1895, inclusive, was $5,229,354 20

The *net* expenditure for maintenance of sewers to June 30, 1895, inclusive, was $450,419 38

Digitized by Google

Bills deposited with the city treasurer for collection from April 1 to June 30, 1895, inclusive, amounted to $320 17

As follows:

Cleaning private connections	$92 25
Use of pump and boiler	90 00
Repairing old drains	13 15
One old carriage	10 00
Pumping out cellars, etc	6 25
Sewer material	91 02
Laying drains to curbstone	17 50
	$320 17

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $332 32

As follows:

Cleaning private connections	$104 40
Use of pump and boiler	90 00
Repairing old drains	13 15
One old carriage	10 00
Pumping out cellars, etc	6 25
Sewer material	91 02
Laying drains to curbstone	17 50
	$332 32

HIGHWAYS.

Nine permits to open streets were issued during the quarter.

April 10th, the proposal of Dennis J. McCarthy to build a brick workshop for the highway department at city yard, Eddy street, was accepted and a contract subsequently executed. Amount, $6,150.

April 15th, the proposal of Smith Concrete Co. to fill the joints of granite block paving during the year 1895, was accepted and a contract subsequently executed.

Digitized by Google

April 16th, the proposal of William H. Covell to grade the new street adjoining the southerly line of the Broad street entrance to Roger Williams Park and deliver screened gravel upon the street, was accepted.

April 17th, the offer of The Narragansett Improvement Co. to lay asphalt pavement in basement of the new city barn corner Eddy and Henderson streets, was accepted.

May 7th, the proposal of The Narragansett Improvement Co. for paving Broadway, from Aborn street to Barton street, with granite blocks and Trinidad Lake asphalt, was accepted and a contract subsequently executed. Amount, $69,510.

During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, viz. :

Camp street, west side, from Olney to Rochambeau avenue.....	$382 28
Doyle avenue, from Camp street to Olney.....	365 96
Total.....	$748 24

During the quarter the following work was completed :

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.			
Sept.	20,	1894,	*Althea street, from Dexter to Cranston.*
"	"	"	*Charles street, from Ledge to Hagan.*
"	"	"	*Forest street, from Camp to Ivy.*
"	"	"	*South street, from Eddy to the river.*
Oct.	18,	"	*Ellery street, from Wendell to Chapin avenue.*
"	"	"	*Eden street, from Broadway to Bell street.*
"	"	"	*Wendell street, from Messer to Ellery.*
"	"	"	*Willow street, from Messer to Ellery.*
Nov.	15,	"	*Abbott street, from Knowles to Camp.*

Digitized by Google

Date of order.			
Dec.	20,	1894,	*Alma street, from Candace to Pekin.*
"	"	"	*Gordon avenue, from Public street to Oxford.*
"	"	"	*Hudson street, from Ellery to Huntington avenue.*
"	"	"	*Kossuth street, from Bowdoin to Putnam.*
"	"	"	*Taylor street, from Glenham to Chester avenue.*
Apr.	18,	1895,	*Governor street, from Power to Williams.*

TO TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.

Sept. 7, 1893, *Harris avenue, from Acorn street to Kinsley avenue.*

TO BE BROUGHT TO GRADE.

Oct. 18, 1894, *Hudson street, from Ellery to Huntington avenue.*

TO BUILD BARN, SET UP STONE CRUSHER, ETC.

No. of resolution.	Date of approval.			
467.	Aug.	6,	1894,	*City Yard, Henderson street.*

TO BUILD BRICK WORKSHOP.

194. April 23, 1895, *City Yard, Eddy street.*

TO BE PAVED WITH GRANITE BLOCKS.

516.	Sept.	25,	1894,	*Richmond street, from Ship to Point.*
151.	April	5,	1895,	*Page street, from Pine to Clifford.*

Digitized by Google

To Concrete Sidewalks.

No. of resolution.	Date of approval.	
620.	Nov. 20, 1894,	*Doyle avenue, from Camp street to Olney.*
620.	" " "	*Camp street, west side, from Olney to Rochambeau avenue.*
190.	April 19, 1895,	*Columbus Park, at junction of Elmwood and Reservoir avenues.*
191.	" " "	*Hoppin Park, corner of Bassett and Elm streets.*
298.	June 21, "	*Prairie avenue, from Point street to Public.*

The following work was in progress June 30, 1895, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Dec. 20, 1894,	*Evergreen street, from Camp to North Main:*—in process.
May 16, 1895,	*Miller avenue, from Broad street to its westerly termination:*—in process.
" " "	*Maryland avenue, from New York avenue to the city line:*—curbing nearly set.
" " "	*Railroad street, from Gaspee to Francis:*—curbing nearly set.
June 20, "	*Potter street, from Pine to Friendship:*—half completed.

To be Repaired.

March 21, 1895,	*Maryland avenue, from Massachusetts avenue to the city line:*—in process.

Digitized by Google

To Grade.

No. of resolution.	Date of approval.	
50.	Jan. 19, 1894,	*Norfolk street, from Oak to Cranston:*—in process.

To Bring to Sub-Grade and Put in Good Condition.

518.	Sept. 25, 1894,	*New York avenue, from Eddy street to Maryland avenue.*
518.	" " "	*Indiana avenue, from Eddy street to Maryland avenue.*
518.	" " "	*Ohio avenue, from Eddy street to Maryland avenue.*
518.	" " "	*California avenue, from Eddy street to Maryland avenue.*
518.	" " "	*Vermont avenue, from Eddy street to Maryland avenue.*
518.	" " "	*Washington avenue, from Broad street to Maryland avenue.*
518.	" " "	*Massachusetts avenue, from Broad street to Maryland avenue.*
518.	" " "	*Virginia avenue, from New York avenue to Montgomery avenue.*
518.	" " "	*Maryland avenue, from New York avenue to Massachusetts avenue.*

To Build.

151.	April 5, 1895,	*Miller avenue, from Broad street to its westerly termination:*—nearly graded.

To be Paved with Granite Blocks.

151.	April 5, 1895,	*Pine street, from Beacon avenue to Hay street:*—three-fourths completed.

Digitized by Google

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Friendship street, from Chestnut to Dyer:*—half completed.
151.	" " "	*Clifford street, from Richmond to Dyer:*—half completed.
151.	" " "	*Potter street, from Weybosset to Friendship:*—half completed.
151.	" " "	*Eddy street, from Weybosset to Ship:*—three-fourths completed.
151.	" " "	*Railroad street, from Gaspee to Francis:*—nearly completed.
187.	" 18, "	*Broadway, from the junction of Jackson and Federal streets to Aborn:*—in process.

TO BE PAVED WITH TRINIDAD ASPHALT.

188.	April 18, 1895,	*Broadway, from Federal street to Barton:*—in process.

The following work, ordered by the board of aldermen and city council, had not commenced June 30, 1895, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Dec. 20, 1894,	*Atlantic avenue, from Elmwood to Melrose street.*
Jan. 17, 1895,	*Fruit street, from Broad to Gordon avenue.*
" " "	*Oakland street, from Elmwood avenue to Public street.*
" " "	*Orchard street, from Oxford to Fruit.*
Feb. 21, "	*Burrington street from Crocker avenue to Pacific.*

Digitized by Google

Date of order.			
April	4,	1895,	*Tingley street, from Acorn to Ashley avenue.*
May	16,	"	*Harris avenue, from Kinsley avenue to Acorn street, and from Acorn street to Eagle.*
"	"	"	*Silver Spring street, from Branch avenue to Charles street.*
"	"	"	*Francis street, from Cove street and Exchange Place to Gaspee street.*
"	"	"	*Hewes street, from Stevens to North Main.*
"	"	"	*Kinsley avenue, from Gaspee street to Harris avenue.*
"	"	"	*Plum street, from Oxford to Fruit.*
"	"	"	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
"	"	"	*Stillman street, from Gaspee to Promenade.*
"	"	"	*West River street, from Branch avenue to bridge north of McKenna street.*
June	20,	"	*Autumn street, from Eddy to Rugby.*
"	"	"	*Frank street, from Plain to Beacon avenue.*
"	"	"	*Gordon avenue, from Oxford street to Gallup.*
"	"	"	*Rhodes street, from Eddy to Allen's avenue.*
"	"	"	*Shawmut street, from Orms to Chalkstone avenue.*
"	"	"	*Summer street, from opposite Meadow to Conduit.*

TO TAKE POSSESSION AND REMOVE OBSTRUCTIONS.

Oct.	18,	1894,	*Washington street, from Eddy to Walker:* —three-fourths of buildings removed.

Digitized by Google

Date of order.			
May	2,	1895,	*Tingley street, from Acorn to Ashley avenue.*
June	20,	"	*Andem street, from Academy avenue to Bergen street.*

To Put in Good Condition.

March	22,	1895,	*Sims avenue, from Harris to Kinsley.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.			
614.	Nov.	20,	1894,	*Traverse street, from Wickenden to Pike.*
151.	April	5,	1895,	*Dyer street, from Ship to the end of the pavement near Friendship.*
151.	"	"	"	*Dorrance street, from end of pavement near Pine to Dyer.*
151.	"	"	"	*Orange street, from Weybosset to Dyer.*
151.	"	"	"	*Peck street, from Weybosset to Dyer.*
151.	"	"	"	*Hay street, from Weybosset to Friendship.*
151.	"	"	"	*Hewes street, from Stevens to North Main.*
151.	"	"	"	*Gaspee street, from Cove to the railroad bridge abutment.*
151.	"	"	"	*Gaspee street, from Kinsley avenue to first angle east of Francis street.*
151.	"	"	"	*Francis street, from Cove and Exchange place to Gaspee street.*
151.	"	"	"	*Stillman street, from Gaspee to Promenade.*
151.	"	"	"	*Kinsley avenue, from Gaspee street to Harris avenue.*

Digitized by Google

No. of resolution.	Date of approval.			
151.	April	5,	1895,	*Harris avenue, from Kinsley to Eagle street.*
151.	"	"	"	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
151.	"	"	"	*The two approaches to the proposed depot in Exchange place.*
151.	"	"	"	*Washington street, from Eddy to Walker.*
333.	June	27,	"	*Cove street, from Sabin to West Exchange.*

To Build.

255.	June	7,	1895,	*East avenue, from Olney street to Rochambeau avenue.*
331.	"	27,	"	*Pitman street, from Wayland avenue to East River street.*
331.	"	"	"	*East River street, including Waterman street, to the new bridge.*
331.	"	"	"	*Sims avenue, from Harris to Kinsley.*

To Re-build.

282.	June	15,	1895,	*Benefit street, from Wickenden to North Main.*

To Grade and Curb.

265.	June	7,	1895,	*Rugby and Jillson streets, adjoining new Fire Station.*

To Purchase, Erect and Maintain.

271.	June	7,	1895,	*Six public urinals in central part of the city.*

Digitized by Google

Bills approved on account of highways from April 1 to June 30, 1895, inclusive, amounted to:

Regular appropriation	$51,093 83	
Special appropriation	81,068 62	
Special credit appropriation	7,448 87	
		$139,611 32

Classified as follows:

Cleaning streets	$17,215 10	
New brick workshop—to build	7,361 10	
Repairs on unpaved streets	5,441 57	
Barn expenses	3,379 35	
New brick barn—to build	3,316 70	
Tools, implements, etc	2,602 69	
Crushed stone—material and labor	1,675 41	
Blacksmith and wheelwright shop	1,612 68	
Steam rollers—repairs and supplies	1,334 23	
Sundries	1,031 27	
Repairs on stone crushers	840 22	
Labor on materials	817 93	
Salaries—superintendent and clerks	741 00	
Repairs on paved streets	699 99	
Stone paving and crosswalk	655 46	
Removing snow and ice	655 00	
Building driveways, etc	503 04	
Watchman at city yard	241 50	
Fencing streets—material and labor	213 02	
Horses, wagons, harnesses, etc	146 89	
Watering streets	108 00	
Office expenses—city yard	14 69	
		50,606 84

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Abbott street, from Knowles to Camp	$1,809 73	
Alma street, from Candace to Pekin	1,078 11	
Althea street, from Dexter to Cranston	4,345 83	
Atlantic avenue, from Elmwood to Melrose street	580 24	
Avenue deeded to the city adjoining Roger Williams Park, from Broad street to its westerly termination	1,615 50	
Charles street, from Ledge to Hagan	7,711 06	
		17,140 47
Amount carried forward		$67,747 31

Digitized by Google

Amount brought forward		$67,747 31
Eden street, from Broadway to Bell street	$1,471 34	
Ellery street, from Wendell to Chapin avenue	323 78	
Evergreen street, from Camp to North Main	554 37	
Forest street, from Camp to Ivy	1,900 52	
Gordon avenue, from Public street to Oxford	2,894 02	
Governor street, from Power to Williams	967 74	
Hudson street, from Ellery to Huntington avenue	1,062 09	
Kossuth street, from Bowdoin to Putnam	455 04	
South street, from Eddy to the river	1,533 01	
Stillman street, from Gaspee to Promenade	531 81	
Taylor street, from Glenham to Chester avenue	896 92	
Wendell street, from Messer to Ellery	1,672 33	
Willow street, from Messer to Ellery	775 73	
		15,038 70
PAVE WITH GRANITE BLOCKS.		
Broadway, from junction of Jackson and Federal streets to Aborn	$333 56	
Clifford street, from Richmond to Dyer	2,048 43	
Dyer street, from Ship to end of pavement near Friendship	54 57	
East and Wickenden streets	102 86	
Eddy street, from Weybosset to Ship	6,233 79	
Friendship street, from Chestnut to Dyer	4,526 11	
Page street, from Pine to Clifford	4,488 58	
Pine street, from Beacon avenue to Hay street	18,166 03	
Potter street, from Weybosset to Friendship	550 85	
Railroad street, from Gaspee to Francis	2,375 22	
Richmond street, from Ship to Point	9,836 82	
		48,716 82
TO GRADE AND PUT IN GOOD CONDITION.		
California avenue, from Eddy street to Maryland avenue	$1,170 55	
Indiana avenue, from Eddy street to Maryland avenue	623 13	
Maryland avenue, from New York to Massachusetts	3,560 37	
New York avenue, from Eddy street to Maryland avenue	1,415 38	
Ohio avenue, from Eddy street to Maryland avenue	362 94	
Vermont avenue, from Eddy street to Maryland avenue	316 50	
		7,448 87
CONCRETE SIDEWALKS.		
Columbus Park, at junction of Elmwood and Reservoir avenues	$252 32	
Hoppin Park, at corner of Bassett and Elm streets	117 67	
		369 99
Amount carried forward		$139,321 69

Digitized by Google

Amount brought forward	$139,321 69
Take Possession, Grade and Put in Good Condition.	
Harris avenue, from Acorn street to Kinsley avenue	117 00
Build.	
East River street, including Waterman, to the new bridge	172 63
	$139,611 32

Bills deposited with the city treasurer for collection from April 1 to June 30, 1895, inclusive, amounted to $3,212 76

As follows:

Union Railroad Co., for granite blocks, etc	$1,837 95
Labor and materials	800 18
Use of steam roller	137 00
Old iron	126 83
Street sweepings	121 80
Discharging cargoes at city wharf	105 00
Manure from barn	62 00
Removing trees	12 00
One old carriage	10 00
	$3,212 76

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $3,209 41

As follows:

Union Railroad Co., for granite blocks, etc	$1,837 95
Labor and materials	788 33
Use of steam roller	145 50
Old iron	126 83
Street sweepings	121 80
Discharging cargoes at city wharf	105 00
Manure from barn	62 00
Removing trees	12 00
One old carriage	10 00
	$3,209 41

Digitized by Google

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from April 1 to June 30, 1895, inclusive, amounted to $15,582 61

Charged as follows:

Granite curbing	$14,369 75	
Concreting sidewalks	1,212 86	
	$15,582 61	

Curbing bills deposited with the city treasurer for collection from April 1 to June 30, 1895, inclusive, amounted to $3,554 00

During the quarter coupons from curbing bills have been returned by the city treasurer and receipted for, amounting to $7,681 77

CITY ENGINEER.

Bills approved on account of the city engineer's department from April 1 to June 30, 1895, inclusive, amounted to $11,849 80

Charged as follows:

Salary, city engineeer	$1,500 00	
Salaries of assistants	8,726 57	
Salaries of clerks	763 75	
Car fares	425 97	
Supplies—drawing materials, etc.	193 06	
Meteorological instruments and repairs	160 60	
Instruments and repairs	56 70	
Sundries	23 15	
	$11,849 80	

Bills deposited with the city treasurer for collection from April 1 to June 30, 1895, inclusive, amounted to $39 68

Digitized by Google

As follows:

Supplies, etc.	$35 68
Set of sewer diagrams	4 00
	$39 68

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $39 68

As follows:

Supplies, etc.	$35 68
Set of sewer diagrams	4 00
	$39 68

BRIDGES.

April 17th, the proposal of the Receivers of the Pennsylvania Steel Co. for the steel superstructure of Washington Row bridge over the Providence river, was accepted and a contract subsequently executed. Amount, $11,218.55.

April 22d, the offer of G. C. Luther to furnish and deliver chestnut piles for Central bridge, was accepted.

April 26th, the offer of James A. Potter & Co. to furnish and deliver at Central bridge about 62,000 feet, B. M., yellow pine lumber, was accepted.

May 23d, the offer of George Gerhard to pull and drive piles at the Central bridge, was accepted.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894,	*New City Yard, Henderson street:* —to grade and fence.
511.	Sept. 25, "	*Red bridge, over the Seekonk river.*
89.	Feb. 26, 1895,	*Washington Row bridge.*

Digitized by Google

The following work had not commenced June 30, 1895, namely:

No. of resolution.	Date of approval.	
831.	Dec. 20, 1892,	*Oak street foot-bridge, over railroad tracks.*
252.	June 7, 1895,	*Promenade street, over the Moshassuck river.*

Bills approved on account of bridges from April 1 to June 30, 1895, inclusive, amounted to $4,816 32

Charged as follows:

Acorn street bridge	$1 85
Atwell's avenue bridge	2 85
Barn expenses	113 76
Burnside bridge	1 92
Cemetery street bridge	2 85
Charles street bridge	11 02
Crawford street bridge	23 83
Delaine street bridge	87 41
Eagle street bridge	1 85
Francis street bridge	64 06
Geneva bridge	1 00
Hawkins street bridge	16 95
Horses, wagons, harnesses, etc	12 26
Lumber, hardware, etc	156 37
Nash lane bridge	4 15
Park street bridge	1 85
Point street bridge	178 94
Randall street bridge	6 85
Removing bridge shop to new city yard	477 63
Rent of keeper's house, Washington bridge	30 00
Salaries—Central or Red bridge	318 50
Salaries—Point street bridge	977 50
Salaries—Washington bridge	481 00
Smithfield avenue bridge	2 85
Stevens street bridge—to rebuild	112 16
Sundries	70 35
Tools	89 34
Veazie street bridge	1 00
Wanskuck bridge	1 00
Washington bridge	412 71
West River street bridge	85
Weybosset bridge	10 50
Whelden street bridge	3 20
Washington Row bridge—to rebuild	1,137 96
	$4,816 32

Digitized by Google

Bills approved for the construction of the new Red bridge, from April 1 to June 30, 1895, inclusive, have been paid from the special appropriation for that work, to the amount of . $15,783 19

Bills deposited with the city treasurer for collection from April 1 to June 30, 1895, inclusive, amounted to $11 00

As follows:

Old lumber from various bridges.....	$6 00
Sweepings from Washington bridge.....	5 00
	$11 00

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $11 00

As follows:

Old lumber from various bridges.....	$6 00
Sweepings from Washington bridge.....	5 00
	$11 00

FILLING COVE BASIN.

Bills approved from April 1 to June 30, 1895, inclusive, for account of paving Promenade street, from railroad bridge to Gaspee street, have been paid from the appropriation for filling the cove basin to the amount of . . . $10,513 14

Digitized by Google

CONTINGENCIES.

Bills approved from April 1 to June 30, 1895, inclusive, for grading and fencing new city yard, Henderson street, have been paid from the appropriation for contingencies to the amount of . $184 00

ROBERT E. SMITH,

Commissioner.

Digitized by Google

FIFTY-FIRST QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1896.

72353

The Providence Press:
Snow & Farnham, City Printers.
75 Dorrance House Street.
1896.

Digitized by Google

Digitized by Google

FIFTY-FIRST

QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1895.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street,
1895.

Digitized by Google

72355

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., October 1, 1895.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-first quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending September 30, 1895:

WATER WORKS.

The Corliss engine, located at the Hope Pumping Station, having become so expensive for pumping water, it was deemed best to invite several builders of pumping engines to submit prices for furnishing a new high-duty pumping engine, to be erected substantially in the same place now occupied by the Corliss engine. The proposition of the Holly Manufacturing Company, of Lockport, N. Y., to furnish, complete in running order, an engine to do a duty of one hundred and ten million foot-pounds with one hundred pounds of coal, for the sum of fifteen thousand dollars and the old engine, was the most favorable one and was accepted. The engine will be capable of pumping five million gallons of water per twenty-four hours, and a saving of about two thousand dollars per year is to be expected in coal alone, besides a large reduction in the cost of labor of attendance.

September 14th, the offer of Chapman Valve Manufacturing Company to furnish and deliver ten 6-inch post hydrants, was accepted. Amount $540.

The average daily consumption of water during the last quarter was 9,198,198 gallons.

Digitized by Google

Water pipes were laid during the quarter, as follows:

12-INCH.

In Cove street, Allen's and East avenues	3,146.11 feet.

8-INCH.

In Cove street, Allen's, East, Taber and Woodward avenues; Land of City of Providence, and Lincoln avenue, town of Warwick; Land of City of Providence, Rolfe street and Pontiac avenue, town of Cranston	1,971.64 feet.

6-INCH.

In Autumn, Berkshire, Bolander, Cove, Dorrance, Eddy, Eighth, Frank, Frankfort, Forest, Grand View, Hamilton, Larch, Merrill, Mason, Porter, Pitman, Rhodes, Rachael, Rockingham, Salina, Saunders, Tyler, Waverly and Whitney streets; Allen's, Alger, Butler, East, Indiana, Laurel, Lillian, Lexington, Pacific, Sims and Summit avenues, Comstock place and Thurber's court; Hayward and Norfolk streets, Blackamore, Chestnut, Oakland, Pontiac and Waterman avenues, town of Cranston; Barrows and Lewis streets, town of Johnston; Apponaug, Jefferson and Lincoln avenues, town of Warwick	23,031.34 feet.
Total	28,149.09 feet.

or 5.331 + miles.

Water pipes were removed during the quarter, as follows:

6-INCH.

In Cove street	207.28 feet.

or .039 + miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	85,365.99 feet.
10-inch	14,653.13 feet.
8-inch	245,726.86 feet.
6-inch	1,051,933.35 feet.
Total	1,554,079.81 feet.

or 294.333 + miles.

Digitized by Google

Thirteen fire hydrants have been set during the quarter, one in each of the following locations:

Alger avenue, east side, opposite Crescent Terrace.
Alger avenue, east side, north corner of Depew street.
Back street, east side, about 60 feet south of Lock street.
Cove street, south side, at the west corner of Mason street.
Cove street, south side, about 120 feet east of Merrill street.
Grand View street, north side, 100 feet east of Highland street.
Indiana avenue, north side, about 420 feet east of Eddy street.
India street, northeast corner of Benefit street.
Lillian avenue, north side, about 300 feet east of Broad street.
Promenade street, north side, about 160 feet west of Francis street.
Salina street, northerly corner of Berkshire street.
Sims avenue, southeast corner of Watson street.
Woodward Road, easterly side, at the southerly corner of Dakota street.

One fire hydrant was removed from Benefit street, corner of India street.

The total number of fire hydrants is now sixteen hundred and eighty—sixteen hundred and twenty-two flush and fifty-eight post hydrants.

During the quarter two hundred and forty-four water meters were set, of which number twenty were to replace other meters. The use of nine meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1¼-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,112	625	148	33	6	.....	.....	.....	3,924
Ball & Fitts, rotary	.....	.....	21	19	2	3	2	.....	47
Crown	6,571	674	176	82	23	11	11	.....	7,548
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Thomson	1,777	284	62	50	22	6	5	4	2,210
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	2	1	.....	.....	1	.....	1	.....	5
	11,490	1,584	509	184	54	20	19	4	13,763

Digitized by Google

Three plumbers' licenses were issued during the quarter, making the total number one hundred and seven, all of which expire December 31, 1895.

Eight hundred and ninety-seven permits to do plumbing work were issued during the quarter.

Two hundred and thirty-eight applications for water were made during the quarter, making the total number September 30, 1895, twenty thousand, eight hundred and twenty-two.

The number of new service stops opened during the quarter was two hundred and thirty-eight.

The total number of service stops opened to September 30, 1895, inclusive, was twenty thousand and seventy-three. The number in actual use September 30, 1895, was eighteen thousand six hundred and ninety-five.

The amount of bills approved on account of water works from July 1 to September 30, 1895, inclusive, was :

For construction and extension, . . . $22,067 52

Classified as follows :

Worthington high-duty pumping engine	$11,317 82
Laying water pipe	5,422 13
Special castings	1,285 44
Stop valves	1,229 82
Laying service pipe	1,152 88
Labor on and carting pipe	407 45
Tools	326 16
Barn expenses	270 57
Wharf salaries	197 50
Horses, wagons, harnesses, etc	181 01
Cast iron water pipe	147 99
Fire hydrants, boxes and covers	71 00
Taps and stops	56 35
Keeper's house, Fruit Hill reservoir	1 40
	$22,067 52

Digitized by Google

For maintenance, ... $24,516 60

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,732 61	
Sundries	852 98	
Firemen	551 00	
Engineers	536 87	
Superintendence	305 57	
Lights	172 04	
Care of grounds	169 00	
Cornish engine house	122 79	
Oil, waste and packing	81 27	
Barn expenses	50 91	
Labor on fuel	44 40	
Worthington high-duty pumping engine	27 10	
Corliss pumping engine and house	10 00	
Real estate	6 25	
Worthington pumping engine	50	
		$5,663 29

SOCKANOSSET RESERVOIR.

Sundries	$212 21	
Watchman	184 00	
		396 21

HOPE PUMPING STATION.

Coal and wood	$1,760 00	
Sundries	982 53	
Engineers	587 89	
Firemen	427 80	
Care of grounds	129 50	
Lights	78 66	
Hope pumping engine, No. 2	60 48	
Oil, waste and packing	21 26	
Hope pumping engine, No. 1	2 00	
		4,050 12

HOPE RESERVOIR.

Sundries	$232 95	
Watchman	221 50	
		454 45

Amount carried forward $10,564 07

Digitized by Google

Amount brought forward		$10,564 07

FRUIT HILL RESERVOIR.

Sundries	$685 92	
Watchman	207 00	
		892 92

PIPE LINE AND SERVICE STOPS.

Repairs	$1,890 11	
Superintendence—salaries	898 62	
		2,788 73

METER DEPARTMENT.

Water meters	$4,675 20	
Setting and repairing meters	1,421 20	
		6,096 40

MISCELLANEOUS.

Clerks' and inspectors' salaries	$2,792 52	
Telephone lines	543 72	
Horses, wagons, harnesses, etc	240 11	
Barn expenses	228 25	
Sundries	194 95	
Analyses of water	90 00	
Prevention of defilement of the Pawtuxet	71 05	
Public drinking fountains and troughs	9 05	
Pipe yard, office expenses	4 83	
		4,174 48
		$24,516 60

The amount of expenditures from July 1 to September 30, 1895, inclusive, was . $46,584 12

The total expenditures to September 30, 1895, inclusive, were $8,153,273 45

The *net* expenditure for construction and extension from July 1 to September 30, 1895, inclusive, was	$20,522 06
The *net* expenditure for construction and extension to September 30, 1895, inclusive, was	$6,119,430 12
The *net* expenditure for maintenance from July 1 to September 30, 1895, inclusive, was	$17,189 45
The *net* expenditure for maintenance to September 30, 1895, inclusive, was	$1,280,869 79

Digitized by Google

Bills deposited with the city treasurer for collection from July 1 to September 30, 1895, inclusive, amounted to $58,509 57

As follows :

Water	$49,289 32
Water meters	5,086 50
Setting and repairing meters	1,937 23
Examination and repairs of pipe line	169 27
Rent of real estate	150 50
Permanently closing service stops	75 00
Penalties	20 00
Old scrap iron	6 00
Labor and material, laying service pipes, etc	1,500 75
Hoisting engine and boiler	275 00
	$58,509 57

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $60,580 48

As follows :

Water	$51,687 87
Water meters	5,024 25
Setting and repairing meters	1,984 38
Rent of real estate	150 50
Permanently closing service stops	75 00
Examination and repairs of pipe line	47 02
Hay at Sockanosset reservoir	40 00
Penalties	20 00
Old scrap iron	6 00
Labor and material, laying service pipes, etc	1,545 46
	$60,580 48

The amount of bills approved on account of water works for the fiscal year ending September 30, 1895, inclusive, was :

For construction and extension, . . . $81,775 93

Classified as follows :

Digitized by Google

Worthington high-duty pumping engine	$25,671 47	
Laying water pipe	16,765 87	
Cast iron water pipe	11,492 91	
Fire hydrants, boxes and covers	5,872 90	
Laying service pipe	4,380 53	
Special castings	3,160 66	
Keeper's house, Fruit Hill reservoir	2,787 09	
Stop valves	2,741 68	
Service pipe	2,257 46	
Labor on and carting pipe	1,381 06	
Taps and stops	1,356 44	
Tools	1,011 28	
Horses, wagons, harnesses, etc	792 37	
Barn expenses	786 92	
Wharf salaries	782 50	
Nagle pumping engine, Hope station	366 76	
Experimental tests of water filtration	148 03	
Watchman at city wharf	20 00	
	$81,775 93	

For maintenance, ... $100,200 88

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$12,569 50	
Sundries	3,103 03	
Engineers	2,692 17	
Firemen	2,387 95	
Cornish engine house	1,598 30	
Superintendence	1,202 57	
Lights	523 36	
Oil, waste and packing	329 18	
Labor on fuel	316 95	
Care of grounds	309 24	
Corliss pumping engine and house	232 96	
Barn expenses	209 46	
Real estate	173 22	
Worthington high-duty pumping engine	34 31	
Worthington pumping engine	8 77	
		$25,690 97

SOCKANOSSET RESERVOIR.

Watchman	$730 00	
Sundries	571 53	
		1,301 53
Amount carried forward		$26,992 50

Digitized by Google

Amount brought forward		$26,992 50
Hope Pumping Station.		
Coal and wood	$2,706 25	
Engineers	2,313 64	
Firemen	1,685 35	
Sundries	1,231 04	
Care of grounds	485 42	
Lights	327 98	
Hope pumping engine, No. 2	219 06	
Hope pumping engine, No. 1	87 66	
Oil, waste and packing	73 02	
		9,129 42
Hope Reservoir.		
Watchman	$835 75	
Sundries	571 49	
		1,407 24
Fruit Hill Reservoir.		
Sundries	$1,981 64	
Watchman	821 25	
		2,802 89
Pipe Line and Service Stops.		
Repairs	$8,595 61	
Superintendence—salaries	3,522 31	
		12,117 92
Meter Department.		
Water meters	$17,882 38	
Setting and repairing meters	6,131 36	
		24,013 74
Miscellaneous.		
Clerks' and inspectors' salaries	$11,747 45	
Town of Cranston, tax	6,839 08	
Prevention of defilement of the Pawtuxet	1,347 71	
Barn expenses	972 58	
Thawing services, etc	609 18	
Telephone lines	547 72	
Horses, wagons, harnesses, etc	402 52	
Town of North Providence, tax	400 00	
Sundries	379 59	
Analyses of water	375 00	
Pipe yard, office expenses	70 89	
Town of Lincoln, tax	18 90	
Real estate at Pawtuxet	17 50	
Public drinking fountains and troughs	9 05	
		23,737 17
		$100,200 88

Digitized by Google

SEWERS.

During the quarter ending September 30, 1895, four hundred and twenty-one permits were issued to drain layers: three hundred and nineteen for new work and one hundred and two for extension and repairs of drains.

Two drain layers' licenses were issued during the quarter, making a total number of fifty-two, all of which expire December 31, 1895.

July 10th, the offer of Smithfield Granite Company to furnish and deliver cut granite for sections 10 and 16 of the improved sewerage system, was accepted.

August 8th, the offer of William H. Sherman to lay sewer connections in Cove street, from Sabin street to West Exchange street, from the main sewer to inside the curb line, was accepted.

August 30th, the offer of R. D. Wood & Co. to furnish and deliver nineteen 48-inch cast iron pipe for section 3, disposal division of the improved sewerage system, was accepted.

September 7th, the proposal of J. W. Bishop & Co. for buildings and chimney for the Ernest Street Sewage Pumping Station, was accepted, and a contract subsequently executed. By the terms of the contract the buildings are to be ready for the roofs November 9, 1895, and to be fully completed December 15, 1895. Amount, $50,000.

September 9th, the proposal of the Maryland Steel Company, of Sparrow's Point, Maryland, to furnish and erect the roofs for the Ernest Street Sewage Pumping Station, was accepted, and a contract subsequently executed.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Hamilton, Irving and Melrose streets $757 50

Digitized by Google

July 15th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To George R. Newman & Co.

No. of resolution.	Date of approval.			
322.	June 27, 1895,	*Public street, from Plain to Eddy,* .	$874 40
347.	July 10, "	*Cedar street, from near Acorn to West Exchange,* . . .	273 45

July 17th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

To George R. Newman & Co.

No. of resolution.	Date of approval.		
301.	June 21, 1895,	*McKinley street, from Roger Williams Park to Elmwood avenue,*	$662 26
323.	" 27, "	*Whitney street, from Alger to Elmwood avenue,*	420 64

August 30th, a contract for building the following sewer of the improved sewerage system was awarded and subsequently executed, namely:

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
406.	July 15, 1889,	*Section 3, Disposal Division,*	$7,000 00

September 5th, contracts for building the following sewers were awarded and subsequently executed, as follows:

Digitized by Google

To Edward W. Everson.

No. of resolution.	Date of approval.				
377.	Aug.	20,	1895,	*Harris avenue, from Acorn street to the Woonasquatucket river,*	$25,465 50

To George R. Newman & Co.

No. of resolution.	Date of approval.				
395.	Aug.	30,	1895,	*Adelaide avenue, from near Melrose street to Hamilton,* .	$400 40
396.	"	"	"	*Chester avenue, from Milk street to Prairie avenue,*	236 70
397.	"	"	"	*Roger Williams Park, Miller avenue and Broad street,* . . .	4,051 70

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
521.	Sept.	25,	1894,	*Section 17, Moshassuck River Division,*	Sept. 24, 1895.
84.	Feb.	23,	1895,	*Hendrick street, from Carleton to Academy avenue,*	July 11, 1895.
207.	May	4,	"	*Autumn street, from Eddy to Rugby,* .	Aug. 9, 1895.
208.	"	"	"	*Chambers street, from Potter's avenue to Huntington,* . . .	July 19, 1895.
209.	"	"	"	*Gay street, from Willard avenue to Robinson street,* .	Sept. 5, 1895.
210.	"	"	"	*Harris and Sims avenues,*	July 23, 1895.

Digitized by Google

No. of resolution.	Date of approval.		
211.	May 4, 1894,	*Lexington avenue, from Niagara street to Hamilton*, . . .	July 31, 1895.
212.	" " "	*Linwood avenue, from Cranston street to Union avenue*, . .	July 11, 1895.
213.	" " "	*Rhodes street and Allen's avenue*, . .	Aug. 19, 1895.
274.	June 7, "	*Acorn street and Harris avenue*, . .	Aug. 16, 1895.
275.	" " "	*Broadway, from Marshall street to Almy*, ...	July 15, 1895.
276.	" " "	*Hewes street, from present end of sewer, northerly*, . . .	July 10, 1895.
287.	" 18, "	*Lillian avenue, from Broad street to Baxter*, ...	Sept. 4, 1895.
301.	" 21, "	*McKinley street, from Roger Williams Park to Elmwood avenue*, ...	Sept. 12, 1895.
322.	" 27, "	*Public street, from Plain to Eddy*, . .	Aug. 29, 1895.
323.	" " "	*Whitney street, from Alger to Elmwood avenue*, ...	Sept. 16, 1895.
347.	July 10, "	*Cedar street, from near Acorn to West Exchange*, . . .	Aug. 19, 1895.

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

Digitized by Google

No. of resolution.	Date of approval.			
406.	July	15,	1889,	*Section* 3, *Disposal Division.*
406.	"	"	"	*Section* 4, *Disposal Division.*
564.	Sept.	23,	1893,	*Section* 10, *Allen's avenue Division.*
521.	"	25,	1894,	*Section* 15, *Siphon Division.*
521.	"	"	"	*Section* 16, *Siphon Division.*
521.	"	"	"	*Section* 18, *Moshassuck River Division.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
377.	Aug.	20,	1895,	*Harris avenue, from Acorn street to the Woonasquatucket river.*
397.	"	30,	"	*Roger Williams Park, Miller avenue and Broad street.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced September 30, 1895, namely:

No. of resolution.	Date of approval.			
395.	Aug.	30,	1895,	*Adelaide avenue, from near Melrose street to Hamilton.*
396.	"	"	"	*Chester avenue, from Milk street to Prairie avenue.*

The amount of bills approved on account of sewers from July 1 to September 30, 1895, inclusive, was:

FOR CONSTRUCTION:

Regular appropriation	$20,773 91	
Improved sewerage system	145,795 11	
		$165,569 02

Digitized by Google

Charged as follows:

Material	$12,699 65
Contract reservations	5,515 00
Salaries of assistant engineers	2,853 86
Clerks' salaries	936 94
Sundries, improved sewerage system	697 66
Testing cement	481 60
Laying drains to curbstones	379 15
Additional catch-basins	270 97
Sundries	100 50
Tools	80
Sewer in Acorn street and Harris avenue	1,493 79
Sewer in Autumn street, from Eddy to Rugby	348 97
Sewer in Broadway, from Marshall street to Almy	129 55
Sewer in Cedar street, from point about 70 feet west of Acorn to West Exchange	272 98
Sewer in Chambers street, from Potter's avenue to Huntington	540 00
Sewer in Gay street, from Willard avenue to Robinson street	182 92
Sewer in Harris avenue, from Acorn street to Woonasquatucket river	687 05
Sewer in Harris and Sims avenues	2,213 81
Sewer in Hendrick street, from Carleton to Academy avenue	393 77
Sewer in Hewes street, from end of present sewer opposite Stampers street, about 120 feet northerly	168 94
Sewer in Lexington avenue, from Niagara street to Hamilton	603 24
Sewer in Lillian avenue, from Broad street to Baxter	853 29
Sewer in Linwood avenue from Cranston street to Union avenue	624 07
Sewer in McKinley street, from Roger Williams Park to Elmwood avenue	695 55
Sewer in Public street, from Plain to Eddy	923 38
Sewer in Rhodes street and Allen's avenue	1,752 31
Sewer in Roger Williams Park, Miller avenue and Broad street	1,346 17
Sewer in Whitney street, from Alger to Elmwood avenue	573 96
Sewer in Allen's avenue Division, Section 10	6,628 50
Sewer in Allen's avenue Division, Section 11	2,391 31
Sewer in Disposal Division, Section 3	6,840 40
Sewer in Moshassuck river Division, Section 17	25,215 74
Sewer in Moshassuck river Division, Section 18	24,945 46
Sewer in Siphon Division, Section 15	3,766 25
Amount carried forward	$107,527 54

Digitized by Google

Amount brought forward	$107,527 54
Sewer in Siphon Division, Section 16	9,443 18
Sewer in Woonasquatucket river Division, Section 14	14 22
Foundation for sewage pumping station	31,011 51
Grading Norfolk street, from Oak to Cranston	2,352 93
Holly sewage pumping engines	16,219 64
	$166,569 02

For maintenance, ... $10,444 35

Charged as follows:

Cleaning basins and sewers	$5,264 26
Repairing basins and sewers	1,910 19
Cleaning and repairing old drains	924 97
Inspection of connections	807 91
Salary, superintendent	395 00
Barn expenses	366 51
Tools	330 09
Horses, wagons, harnesses, etc	266 86
Removing buildings to new city yard	79 94
Sundries	52 95
Cleaning private connections	32 00
Telephone lines	11 67
Filling cisterns, etc	2 00
	$10,444 35

The *net* expenditure for construction of sewers to September 30, 1895, inclusive, was $5,395,207 22

The *net* expenditure for maintenance of sewers to September 30, 1895, inclusive, was $460,781 78

Bills deposited with the city treasurer for collection from July 1 to September 30, 1895, inclusive, amounted to $790 20

As follows:

Cleaning private connections	$66 00
Old manhole frames and covers	6 20
Filling cisterns, etc	2 00
Sewer material	635 58
Laying drains to curbstone	79 02
Testing cement	1 40
	$790 20

Digitized by Google

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $797 95

As follows:

Cleaning private connections	$73 75
Old manhole frames and covers	6 20
Filling cisterns, etc	2 00
Sewer material	635 58
Laying drains to curbstone	79 02
Testing cement	1 40
	$797 95

The amount of bills approved on account of sewers for the fiscal year ending September 30, 1895, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$68,991 15	
Improved sewerage appropriation	439,850 50	
		$508,841 65

Charged as follows:

Material	$34,151 19
Contract reservations	15,838 00
Salaries of assistant engineers	11,027 61
Clerks' salaries	3,712 18
Sundries, improved sewerage system	2,975 18
Testing cement	1,513 36
Additional catch-basins	1,251 13
Sundries	601 26
Laying drains to curbstone	421 63
Watchman at city wharf	54 00
Tools	25 85
Sewer in Abbott street, from Camp to Knowles	2,558 03
Sewer in Acorn street and Harris avenue	1,493 79
Sewer in Althea street, from Cranston to Dexter	569 21
Sewer in Autumn street, from Eddy to Rugby	348 97
Sewer in Barton street, from Broadway to Westminster street	596 56
Sewer in Benevolent street, from summit near Cooke to Hope	463 51
Amount carried forward	$77,601 46

Digitized by Google

Amount brought forward	$77,601 46
Sewer in Bolander street, from Grand View to Abbott	1,863 12
Sewer in Brattle street, from Waldo to Lilac	194 47
Sewer in Broadway, from Marshall street to Almy	129 55
Sewer in Burnett street, Adelaide avenue and Broad street	19 62
Sewer in Butler avenue, from Angell street to South Angell	426 30
Sewer in Cedar street, from point about 70 feet west of Acorn to West Exchange	272 98
Sewer in Chambers street, from Potter's avenue to Huntington	540 00
Sewer in Cranston street, from Potter's avenue to Huntington	576 04
Sewer in Eddy and Broad streets	6,541 52
Sewer in Gay street, from Willard avenue to Robinson street	182 92
Sewer in Gesler street, from Courtland to Almy	739 82
Sewer in Harris avenue, from Acorn street to Woonasquatucket river	687 05
Sewer in Harris and Sims avenues	3,001 32
Sewer in Hendrick street, from Carleton to Academy avenue	1,949 38
Sewer in Hewes street, from end of present sewer opposite Stampers, about 120 feet northerly	186 01
Sewer in Howard and Perry streets, Broadway, Eden and Bell streets	2,771 79
Sewer in Ives street, from north side of Medway to Waterman	370 66
Sewer in Lexington avenue, from Niagara street to Hamilton	603 24
Sewer in Lillian avenue, from Broad street to Baxter	853 29
Sewer in Linwood avenue, from Cranston street to Union avenue	1,349 67
Sewer in Marlborough and Frank streets	945 90
Sewer in McKinley street, from Roger Williams Park to Elmwood avenue	695 55
Sewer in Medway street, from Gano to near Ives	649 27
Sewer in Orchard and Fruit streets	1,130 71
Sewer in Plum street, from Oxford to Fruit	283 73
Sewer in Pomona avenue, from Academy to Pemberton street	555 20
Sewer in Public street, from Plain to Eddy	923 38
Sewer in Rhodes street and Allen's avenue	1,752 31
Sewer in Roger Williams Park, Miller avenue and Broad street	1,346 17
Amount carried forward	$109,142 43

Digitized by Google

Amount brought forward	$109,142 43
Sewer in Shawmut street, from Orms to Chalkstone avenue	661 72
Sewer in South Angell and East River streets	2,038 72
Sewer in Stewart street, from Broad to Conduit	313 31
Sewer in Taylor street and Reynolds avenue	1,087 37
Sewer in Wendell and Ellery streets	1,047 61
Sewer in Whitney street, from Alger to Elmwood avenue	573 96
Sewer in Willow, Ellery, Hudson and Wood streets	3,008 27
Sewer in Allen's avenue Division, Section 10	46,526 11
Sewer in Allen's avenue Division, Section 11	19,539 68
Sewer in Disposal Division, Section 3	6,840 40
Sewer in Moshassuck river Division, Section 17	53,335 35
Sewer in Moshassuck river Division, Section 18	24,957 13
Sewer in Norfolk and Station streets	11,899 42
Sewer in Siphon Division, Section 15	23,500 92
Sewer in Siphon Division, Section 16	34,828 42
Sewer in Woonasquatucket river Division, Section 13	12,052 44
Sewer in Woonasquatucket river Division, Section 14	19,453 04
Construction of water way for brook through the Rathbone street sewer	497 54
Foundation for sewage pumping station	54,291 77
Grading Norfolk street from Oak to Cranston	8,129 36
Holly sewage pumping engines	75,116 68
	$506,841 65

For maintenance, ... $33,967 81

Charged as follows:

Cleaning basins and sewers	$14,095 61
Repairing basins and sewers	6,456 34
Inspection of connections	3,225 39
Cleaning and repairing old drains	2,444 64
Tools	1,812 35
Salary, superintendent	1,565 00
Barn expenses	1,525 77
Removing buildings to new city yard	1,085 66
Horses, wagons, harnesses, etc	1,056 33
Sundries	286 73
Cleaning private connections	202 10
Filling cisterns, etc	125 22
Old freight house at city yard	75 00
Telephone lines	11 67
	$33,967 81

Digitized by Google

HIGHWAYS.

Seven permits to open streets were issued during the quarter.

August 5th, curbing bills were certified to the assessors of taxes aggregating $17,653.53.

August 20th, the offer of Narragansett Improvement Company for furnishing labor and material for concrete foundation for granite block pavement in Cove street, from Sabin street to West Exchange street, was accepted.

During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, viz. :

Prairie avenue, from Point street to Public	$271 28

During the quarter the following work was completed :

Sidewalks to be Curbed and Gutters Paved.

Date of order.			
Dec.	20,	1894,	*Evergreen street, from Camp to North Main.*
"	"	"	*Atlantic avenue, from Elmwood to Melrose street.*
Jan.	17,	1895,	*Fruit street, from Broad to Gordon avenue.*
"	"	"	*Oakland street, from Elmwood avenue to Public street.*
"	"	"	*Orchard street, from Oxford to Fruit.*
Feb.	21,	"	*Burrington street from Crocker avenue to Pacific.*
April	4,	1895,	*Tingley street, from Acorn to Ashley avenue.*

Digitized by Google

Date of order.			
May	16,	1895,	*Hewes street, from Stevens to North Main.*
"	"	"	*Plum street, from Oxford to Fruit.*
"	"	"	*Stillman street, from Gaspee to Promenade.*
"	"	"	*Maryland avenue, from New York avenue to the city line.*
"	"	"	*Railroad street, from Gaspee to Francis.*
June	20,	"	*Potter street, from Pine to Friendship.*
"	"	"	*Shawmut street, from Orms to Chalkstone avenue.*
"	"	"	*Summer street, from opposite Meadow to Conduit.*
Aug.	1,	"	*Cove street, from Sabin to West Exchange.*
"	"	"	*Sims avenue, from Harris to Kinsley.*

TO BE REPAIRED.

March	21,	1895,	*Maryland avenue, from Massachusetts avenue to the city line.*

TO TAKE POSSESSION AND REMOVE OBSTRUCTIONS.

Oct.	18,	1894,	*Washington street, from Eddy to Walker.*
May	2,	1895,	*Tingley street, from Acorn to Ashley avenue.*
June	20,	"	*Andem street, from Academy avenue to Bergen street.*
Aug.	1,	"	*Dunwell's gangway, from Weybosset street to Dyer.*

TO PUT IN GOOD CONDITION.

March	22,	1895,	*Sims avenue, from Harris to Kinsley.*

TO GRADE.

Sept.	19,	1895,	*Chambers street, from Potter's avenue to Huntington.*

Digitized by Google

To Bring to Sub-Grade and Put in Good Condition.

No. of resolution.	Date of approval.			
518.	Sept.	25,	1894,	*New York avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Indiana avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Ohio avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*California avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Vermont avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Maryland avenue, from New York avenue to Massachusetts avenue.*

To be Paved with Granite Blocks.

151.	April	5,	1895,	*Friendship street, from Chestnut to Dyer.*
151.	"	"	"	*Clifford street, from Richmond to Dyer.*
151.	"	"	"	*Potter street, from Weybosset to Friendship.*
151.	"	"	"	*Eddy street, from Weybosset to Ship.*
151.	"	"	"	*Railroad street, from Gaspee to Francis.*
151.	"	"	"	*Dorrance street, from end of pavement near Pine to Dyer.*
151.	"	"	"	*Hewes street, from Stevens to North Main.*
151.	"	"	"	*Stillman street, from Gaspee to Promenade.*
187.	"	18,	"	*Broadway, from the junction of Jackson and Federal streets to Aborn.*
333.	June	27,	"	*Cove street, from Sabin to West Exchange.*

Digitized by Google

To be Paved with Trinidad Asphalt.

No. of resolution.	Date of approval.	
188.	April 18, 1895,	*Broadway, from Federal street to Barton.*

To Build.

331.	June 27, 1895,	*Sims avenue, from Harris to Kinsley.*

To Grade and Curb.

265.	June 7, 1895,	*Rugby and Jillson streets, adjoining new Fire Station.*

To Concrete Sidewalks.

407.	Sept. 10, 1895,	*Fenner Park.*
417.	" 19, "	*Providence street, from Prairie avenue to Dudley street.*
417.	" " "	*Lockwood street, from Broad to Prairie avenue.*
417.	" " "	*Summer street, from Point to Broad.*
417.	" " "	*Beacon avenue, from Friendship street to Lockwood.*
417.	" " "	*Stewart street, from Broad to Westminster.*
417.	" " "	*Linden street, from Broad to Providence.*
417.	" " "	*Carpenter street, from Marshall to Courtland.*

The following work was in progress September 30, 1895, viz.:

Digitized by Google

Sidewalks to be Curbed and Gutters Paved.

Date of order.			
May	16,	1895,	*Miller avenue, from Broad street to its westerly termination:*—in process.
"	"	"	*Harris avenue, from Kinsley to Acorn street, and from Acorn to Eagle:*—one-half completed.
"	"	"	*Kinsley avenue, from Gaspee street to Harris avenue:*—in process.
"	"	"	*West River street, from Branch avenue to bridge north of McKenna street:*—in process.
June	20,	"	*Rhodes street, from Eddy to Allen's avenue:*—nearly completed.

To Grade.

No. of resolution.	Date of approval.			
50.	Jan.	19,	1894,	*Norfolk street, from Oak to Cranston:*—in process.

To Bring to Sub-Grade and Put in Good Condition.

518.	Sept.	25,	1894,	*Washington avenue, from Broad street to Maryland avenue.*
518.	"	"	"	*Massachusetts avenue, from Broad street to Maryland avenue.*
518.	"	"	"	*Virginia avenue, from New York avenue to Montgomery.*

To Build.

151.	April	5,	1895,	*Miller avenue, from Broad street to its westerly termination:*—in process.
255.	June	7,	"	*East avenue, from Olney street to Rochambeau avenue:*—nearly completed.

Digitized by Google

No. of resolution.	Date of approval.	
331.	June 27, 1895,	*Pitman street, from Wayland avenue to East River street:*—in process.
331.	" " "	*East River street, including Waterman street, to the new bridge:*—in process.

TO BE PAVED WITH GRANITE BLOCKS.

151.	April 5, 1895,	*Pine street, from Beacon avenue to Hay street:* — three-fourths completed.
151.	" " "	*Dyer street, from Ship to the end of the pavement near Friendship:*— one-half completed.
151.	" " "	*Kinsley avenue, from Gaspee street to Harris avenue:*—in process.
151.	" " "	*Harris avenue, from Kinsley to Eagle street:*—one-half completed.

The following work, ordered by the board of aldermen and city council, had not commenced September 30, 1895, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Silver Spring street, from Branch avenue to Charles street.*
" " "	*Francis street, from Cove street and Exchange place to Gaspee street.*
" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
June 20, "	*Autumn street, from Eddy to Rugby.*
" " "	*Frank street, from Plain to Beacon avenue.*
" " "	*Gordon avenue, from Oxford street to Gallup.*

Digitized by Google

Date of order.			
Sept.	19,	1895,	*Huntington avenue, from Cranston street to Union avenue.*
"	"	"	*River avenue, from Chalkstone to the brook on River avenue.*
"	"	"	*Forest street, from Ivy to East avenue.*
"	"	"	*Greeley street, from Charles to Opper.*
"	"	"	*Linwood avenue, from Cranston street to Union avenue.*
"	"	"	*Lisbon street, from Chalkstone avenue to Regent.*
"	"	"	*Marlborough street, from East Beacon to Pearl.*
"	"	"	*Reynolds avenue, from Broad street to Taylor.*
"	"	"	*Wood street, from Ellery to Huntington avenue.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.			
614.	Nov.	20,	1894,	*Traverse street, from Wickenden to Pike.*
151.	April	5,	1895,	*Orange street, from Weybosset to Dyer.*
151.	"	"	"	*Peck street, from Weybosset to Dyer.*
151.	"	"	"	*Hay street, from Weybosset to Friendship.*
151.	"	"	"	*Gaspee street, from Cove to the railroad bridge abutment.*
151.	"	"	"	*Gaspee street, from Kinsley avenue to first angle east of Francis street.*
151.	"	"	"	*Francis street, from Cove and Exchange place to Gaspee street.*
151.	"	"	"	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*

Digitized by Google

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*The two approaches to the proposed depot in Exchange place.*
151.	" " "	*Washington street, from Eddy to Walker.*

To Re-build.

282.	June 15, 1895,	*Benefit street, from Wickenden to North Main.*

To Purchase, Erect and Maintain.

271.	June 7, 1895,	*Six public urinals in central part of the city.*

To Concrete Sidewalks.

417.	Sept. 19, 1895,	*Angell street, from Prospect to Benefit.*
417.	" " "	*Transit street, from Brook to Hope.*
417.	" " "	*Cushing street, from Prospect to Hope.*
417.	" " "	*Livingstone street, from West River to North Main.*
417.	" " "	*Walker street, from Westminster to Washington.*
417.	" " "	*Walnut street, from Westminster to Washington.*
417.	" " "	*Elm street, from Hoppin to Butler.*
417.	" " "	*South Main street, from Power to Transit.*
417.	" " "	*Oriole avenue, from Butler to Grand.*
417.	" " "	*Olney street, from North Main to East avenue.*

Digitized by Google

No. of resolution.	Date of approval.			
417.	Sept.	19,	1895,	*Taber avenue, from Angell street to Irving avenue.*
417.	"	"	"	*East Manning street, from Governor to Wayland avenue.*
417.	"	"	"	*Williams street, from Benefit to South Main.*
417.	"	"	"	*Broad street, from Trinity square to the city line.*
417.	"	"	"	*Cranston street, from Messer to the city line.*
417.	"	"	"	*Point street, from Friendship to Plain.*
417.	"	"	"	*Burrill street, from Westminster to Weybosset.*
417.	"	"	"	*Pine street, from Beacon avenue to Hay street.*
417.	"	"	"	*Carrington avenue, from Camp street to East avenue.*
417.	"	"	"	*Bacon street, from North Main to Camp.*
417.	"	"	"	*Arlington avenue, from Angell street to Irving avenue.*
417.	"	"	"	*Washington avenue, from Broad street to Maryland avenue.*

Bills approved on account of highways from July 1 to September 30, 1895, inclusive, amounted to:

Regular appropriation	$63,096 41	
Special appropriation	186,635 57	
Special credit appropriation	5,504 01	
		$255,235 99

Classified as follows:

Cleaning streets	$15,729 39
Crushed stone—material and labor	14,197 05
Repairs on unpaved streets	12,697 01
Repairs on paved streets	5,153 31
Amount carried forward	$47,776 76

Digitized by Google

Amount brought forward	$47,776 76	
Transfer to reservation fund for account of Broadway	3,494 00	
Tools, implements, etc	3,362 25	
Blacksmith and wheelwright shop	2,387 59	
Barn expenses	2,049 78	
Labor on materials	1,398 15	
Repairs on stone crushers	948 90	
Stone—paving and crosswalk	910 77	
Salaries—superintendent and clerks	750 50	
Steam rollers—repairs and supplies	500 80	
Building driveways, etc	363 07	
Horses, wagons, harnesses, etc	343 70	
New brick workshop—to build	263 38	
Sundries	186 29	
Watering streets	184 34	
Watchman at city yard	158 00	
Telephone lines	35 00	
Fencing streets—material and labor	17 34	
Office expenses—city yard	55	
		$65,131 17

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Alma street, from Candace to Pekin	$8 21	
Atlantic avenue, from Elmwood to Melrose street	1,968 85	
Avenue deeded to the city adjoining Roger Williams Park, from Broad street to its westerly termination	2,276 93	
Burrington street, from Crocker avenue to Pacific	1,717 86	
Eden street, from Broadway to Bell street	5 73	
Evergreen street, from Camp to North Main	2,771 69	
Forest street, from Camp to Ivy	48 20	
Fruit street, from Broad to Gordon avenue	1,803 38	
Gordon avenue, from Public street to Oxford	23 75	
Hewes street, from Stevens to North Main	6,153 88	
Linwood avenue, from Cranston street to Union avenue	150 62	
Oakland street, from Elmwood avenue to Public street	487 19	
Orchard street, from Oxford to Fruit	710 94	
Plum street, from Oxford to Fruit	842 89	
Rhodes street, from Eddy to Allen's avenue	800 04	
Shawmut street, from Orms to Chalkstone avenue	1,812 26	
Summer street, from opposite Meadow to Conduit	68 65	
Taylor street, from Glenham to Chester avenue	22 98	
Tingley street, from Acorn to Ashley avenue	728 11	
Amounts carried forward	$22,402 16	$65,131 17

Digitized by Google

Amounts brought forward	$22,402 16	$65,131 17
Wendell street, from Messer to Ellery	1 98	
West River street, from Branch avenue to bridge north of McKenna street	762 91	
Willow street, from Messer to Ellery	12 90	
		23,179 95

PAVE WITH GRANITE BLOCKS.

Broadway, from junction of Jackson and Federal streets to Aborn	$5,713 87	
Clifford street, from Richmond to Dyer	2,491 25	
Cove street, from Sabin to West Exchange	6,947 75	
Dorrance street, from end of Pavement near Pine to Dyer	1,688 59	
Dyer street, from Ship to end of pavement near Friendship	2,702 14	
Eddy street, from Weybosset to Ship	11,558 66	
Francis street, from Cove and Exchange place to Gaspee street, except a portion now paved over the bridge	428 92	
Friendship street, from Chestnut to Dyer	6,134 98	
Harris avenue, from Kinsley to Eagle street	28,279 74	
Kinsley avenue, from Gaspee street to Harris avenue	85 72	
Page street, from Pine to Clifford	91 12	
Peck street, from Weybosset to Dyer	55 00	
Pine street, from Beacon avenue to Hay street	853 14	
Potter street, from Weybosset to Friendship	5,348 80	
Railroad street, from Gaspee to Francis	6,935 82	
Richmond street, from Ship to Point	13 58	
Sims avenue, from Harris to Kinsley	2,831 52	
Stillman street, from Gaspee to Promenade	7,698 50	
		89,939 10

PAVE WITH TRINIDAD ASPHALT.

Broadway, from Federal street to Barton		63,676 81

TO GRADE AND PUT IN GOOD CONDITION.

Indiana avenue, from Eddy street to Maryland avenue	$1,612 80	
Maryland avenue, from New York to Massachusetts	1,902 65	
New York avenue, from Eddy street to Maryland avenue	78 70	
Vermont avenue, from Eddy street to Maryland avenue	448 36	
Virginia avenue, from New York to Montgomery	587 90	
Washington avenue, from Broad street to Maryland avenue	873 60	
		5,504 01
Amount carried forward		$247,431 04

Digitized by Google

Amount brought forward		$247,431 04
BUILD.		
East avenue, from Olney street to Rochambeau avenue	$6,610 96	
Pitman street, from Wayland avenue to East River street	754 06	
		7,365 02
CONCRETE SIDEWALKS.		
Fenner Park		154 13
TAKE POSSESSION.		
Andem street, from Academy avenue to Bergen street		58 20
TO BE BROUGHT TO GRADE.		
Chambers street, from Potter's avenue to Huntington		218 60
TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.		
Harris avenue, from Acorn street to Kinsley avenue		9 00
		$255,235 99

Bills deposited with the city treasurer for collection from July 1 to September 30, 1895, inclusive, amounted to $17,118 49

As follows:

Union Railroad Co., for granite blocks and asphalt	$15,214 85
New York and New England Railroad Co., for granite blocks	1,314 67
Labor and materials	303 14
Use of steam roller	102 00
Discharging cargoes at city wharf	83 63
Manure from barn	74 00
Old harness	20 00
Removing trees	5 00
Old oil barrels	1 20
	$17,118 49

Digitized by Google

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $1,705 90

As follows:

Union Railroad Co., for granite blocks	$1,117 62
Labor and materials	302 45
Use of steam roller	102 00
Discharging cargoes at city wharf	83 63
Manure from barn	74 00
Old harness	20 00
Removing trees	5 00
Old oil barrels	1 20
	$1,705 90

Bills approved on account of highways for the fiscal year ending September 30, 1895, inclusive, amounted to:

Regular appropriation	$205,922 25	
Special appropriation	338,137 22	
Special credit appropriation	23,959 21	
		$568,018 68

Classified as follows:

Cleaning streets	$48,679 90
Repairs on unpaved streets	29,661 26
Crushed stone—material and labor	25,977 02
New brick barn—to build	25,476 06
Tools, implements, etc	12,625 59
Barn expenses	9,957 28
Repairs on paved streets	8,047 87
New brick workshop—to build	7,624 48
Blacksmith and wheelwright shop	6,805 85
Transfer to reservation fund for account of Pine street and Broadway	4,520 00
Removing stone crusher and highway buildings to new city yard	4,390 79
Removing snow and ice	4,087 17
Labor on materials	3,281 03
Salaries—superintendent and clerks	2,973 50
Steam rollers—repairs and supplies	2,649 61
Repairs on stone crushers	2,428 94
Stone—paving and crosswalk	1,566 23
Sundries	1,534 39
Screening gravel	1,523 83
Amount carried forward	$203,810 80

Digitized by Google

Amount brought forward	$203,810 80	
Building driveways, etc	1,104 71	
Horses, wagons, harnesses, etc	1,075 59	
Watchman at city yard	809 00	
Watering streets	342 34	
Fencing streets—material and labor	281 35	
Repairing sidewalks and driveways opposite public buildings	136 15	
Office expenses, city yard	115 24	
Watchman at city wharf	56 00	
Telephone lines	53 79	
		$207,784 97

New Work—Building and Rebuilding Streets, etc.

Sidewalks Curbed and Gutters Paved.

Abbott street, from Knowles to Camp	$1,809 73	
Admiral street, from Whipple to Mowry	6,533 68	
Alma street, from Candace to Pekin	1,086 32	
Althea street, from Dexter to Cranston	7,673 24	
Atlantic avenue, from Elmwood to Melrose street	2,549 09	
Atlantic avenue, from Melrose street to Hamilton	2,521 52	
Avenue deeded to the city, adjoining Roger Williams Park, from Broad street to its westerly termination	3,892 43	
Burrington street, from Crocker avenue to Pacific	1,717 86	
Canton street, from Regent avenue to Chalkstone	255 51	
Charles street, from Ledge to Hagan	7,711 06	
Eden street, from Broadway to Bell street	2,164 54	
Ellery street, from Wendell to Chapin avenue	323 78	
Evergreen street, from Camp to North Main	3,326 06	
Forest street, from Camp to Ivy	2,398 72	
Fruit street, from Broad to Gordon avenue	1,803 38	
Gordon avenue, from Public street to Oxford	2,917 77	
Governor street, from Power to Williams	967 74	
Hewes street, from Stevens to North Main	6,153 88	
Howard street, from Westminster to Broadway	1,501 62	
Hudson street, from Ellery to Huntington avenue	1,062 09	
Kossuth street, from Bowdoin to Putnam	455 04	
Linwood avenue, from Cranston street to Union avenue	150 62	
Mitchell street, from Broad to Melrose	2,167 95	
Oakland street, from Elmwood avenue to Public street	487 19	
Orchard street, from Oxford to Fruit	710 94	
Plum street, from Oxford to Fruit	842 89	
Rhodes street, from Eddy to Allen's avenue	800 04	
Amounts carried forward	$63,984 69	$207,784 97

Digitized by Google

Amounts brought forward	$53,984 69	$207,784 97
Rutland street, from Elmwood avenue to Bucklin street	602 47	
Shawmut street, from Orms to Chalkstone avenue	1,812 26	
South street, from Eddy to the river	1,883 46	
Staniford street, from Blackstone to Willard avenue	960 46	
Summer street, from opposite Meadow to Conduit	68 65	
Taylor street, from Glenham to Chester avenue	919 90	
Tingley street, from Acorn to Ashley avenue	728 11	
Union avenue, from Messer street to city line	4,159 44	
Wendell street, from Messer to Ellery	1,674 31	
West River street, from Branch avenue to bridge north of McKenna street	762 91	
Willow street, from Messer to Ellery	788 63	
		78,345 29
Pave with Granite Blocks.		
Broadway, from junction of Jackson and Federal streets to Aborn	$6,127 43	
Clifford street, from Richmond to Dyer	4,539 68	
Cove street, from Sabin to West Exchange	6,947 75	
Dorrance street, from end of pavement near Pine to Dyer	1,688 59	
Dyer street, from Ship to end of pavement near Friendship	2,756 71	
East and Wickenden streets	5,510 79	
Eddy street, from Weybosset to Ship	17,792 45	
Francis street, from Cove and Exchange place to Gaspee street, except a portion now paved on the bridge	428 92	
Friendship street, from Chestnut to Dyer	10,661 09	
Harris avenue, from Kinsley to Eagle street	28,279 74	
Kinsley avenue, from Gaspee street to Harris avenue	85 72	
Olney street, from present end of pavement to Camp	3,515 05	
Page street, from Pine to Clifford	4,579 70	
Peck street, from Weybosset to Dyer	55 00	
Pine street, from Beacon avenue to Hay street	19,019 17	
Potter street, from Weybosset to Friendship	5,899 65	
Railroad street, from Gaspee to Francis	9,311 04	
Richmond street, from Ship to Point	9,850 40	
Sims avenue, from Harris to Kinsley	2,831 52	
South Main street, from Planet to James	2,654 20	
Stillman street, from Gaspee to Promenade	8,230 31	
Wickenden street, from Transit to Brook	3,048 89	
		153,813 80
Pave with Bricks or Trinidad Asphalt.		
Clemence street, from Westminster to Washington	$149 02	
Pine street, from Beacon avenue to Broad street	21,372 68	
		21,521 70
Amount carried forward		$461,465 76

Digitized by Google

Amount brought forward		$461,465 76
PAVE WITH TRINIDAD ASPHALT.		
Broadway, from Federal street to Barton		63,676 81
TO GRADE AND PUT IN GOOD CONDITION.		
California avenue, from Eddy street to Maryland avenue	$1,461 52	
Indiana avenue, from Eddy street to Maryland avenue	2,235 93	
Maryland avenue, from New York to Massachusetts	7,939 79	
New York avenue, from Eddy street to Maryland avenue	2,465 62	
Ohio avenue, from Eddy street to Maryland avenue	1,264 09	
Vermont avenue, from Eddy street to Maryland avenue	1,805 39	
Virginia avenue, from New York to Montgomery	1,032 15	
Washington avenue, from Broad street to Maryland avenue	873 60	
		19,078 09
TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.		
Harris avenue, from Acorn street to Kinsley avenue		837 05
TAKE POSSESSION.		
Andem street, from Academy avenue to Bergen street		58 20
TO BE BROUGHT TO GRADE.		
Abbott street, from Camp to Knowles	$1,510 80	
Chambers street, from Potter's avenue to Huntington	218 60	
		1,729 40
BUILD.		
East avenue, from Olney street to Rochambeau avenue	$6,610 96	
East River street, including Waterman, to the new bridge	172 63	
Pitman street, from Wayland avenue to East River street	754 06	
		7,537 65
TO GRADE AND BUILD.		
Blackstone Boulevard, from Rochambeau avenue to East		13,111 60
Amount carried forward		$567,494 56

Digitized by Google

Amount brought forward		$567,494 56
CONCRETE SIDEWALKS.		
Columbus Park, at junction of Elmwood and Reservoir avenues	$252 32	
Fenner Park	154 13	
Hoppin Park, at corner of Bassett and Elm streets.	117 67	
		524 12
		$568,018 68

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from July 1 to September 30, 1895, inclusive, amounted to $11,889 99

Charged as follows:

Granite curbing	$11,862 99
Concreting sidewalks	27 00
	$11,889 99

Curbing bills deposited with the city treasurer for collection from July 1 to September 30, 1895, inclusive, amounted to . . . $278 57

During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . . $1,470 01

The expenditures on account of sidewalks and curbing for the fiscal year ending September 30, 1895, inclusive, amounted to . . . $39,153 28

Charged as follows:

Granite curbing	$36,925 55
Concreting sidewalks	2,227 73
	$39,153 28

Digitized by Google

CITY ENGINEER.

Bills approved on account of the city engineer's department from July 1 to September 30, 1895, inclusive, amounted to $13,018 81

Charged as follows:

Salary, city engineer	$1,500 00
Salaries of assistants	9,921 31
Salaries of clerks	773 54
Car fares	448 08
Supplies—drawing materials, etc	263 55
Instruments and repairs	52 20
Telephone lines	41 67
Sundries	16 71
Meteorological instruments and repairs	1 75
	$13,018 81

Bills deposited with the city treasurer for collection for supplies sold from July 1 to September 30, 1895, inclusive, ... 95

During the quarter coupons from bills collected for supplies sold have been returned by the city treasurer and receipted for, amounting to . 95

Bills approved on account of the city engineer's department for the fiscal year ending September 30, 1895, inclusive, amounted to . $50,996 09

Charged as follows:

Salary—city engineer	$6,000 00
Salaries of assistants	39,189 46
Salaries of clerks	3,064 79
Car fares	1,377 65
Supplies—drawing materials, etc	866 71
Instruments and repairs	186 55
Meteorological instruments and repairs	186 35
Sundries	81 61
Telephone lines	42 97
	$50,996 09

Digitized by Google

BRIDGES.

July 24th, the proposal of John T. Tank to build a pier for the Promenade street bridge over the Moshassuck river, was accepted and a contract subsequently executed. Amount, $7,205.

July 24th, the proposal of John B. Reilly, of Trenton, N. J., to build the abutment walls and piers for the Exchange bridge over the Providence river, was accepted and a contract subsequently executed. Amount, $33,012.

July 29th, the offer of James McKinnon to enlarge the crib-work for the new Central bridge, was accepted.

September 4th, the offer of Volney W. Mason & Co. for operating machinery for the draw to the new Central bridge, was accepted. Amount, $1,950.

September 10th, the offer of H. G. Martin & Co. for furnishing electric motors for operating the draw to the new Central bridge, was accepted. Amount, $1,360.

September 19th, the proposal of Norton Iron Company, of East Everett, Mass., to construct steel superstructure for the Exchange bridge over the Providence river, was accepted and a contract subsequently executed. Amount, $23,576.31.

September 19th, the proposal of Norton Iron Company, of East Everett, Mass., to construct steel superstructure for the Promenade street bridge over the Moshassuck river, was accepted and a contract subsequently executed. Amount, $13,168.75.

The following work was in progress at the end of the quarter, namely:

Digitized by Google

No of resolution.	Date of approval.			
48.	Jan.	19,	1894,	*New City Yard, Henderson street:* —to grade and fence.
511.	Sept.	25,	"	*Red bridge, over the Seekonk river.*
89.	Feb.	26,	1895,	*Washington row bridge.*
252.	June	7,	"	*Promenade street, over the Moshassuck river.*
346.	July	10,	"	*Exchange bridge, over the Providence river.*

The following work had not commenced September 30, 1895, namely:

No. of resolution.	Date of approval.			
831.	Dec.	20,	1892,	*Oak street foot-bridge, over railroad tracks.*

Bills approved on account of bridges from July 1 to September 30, 1895, inclusive, amounted to . $15,848 03

Charged as follows:

Acorn street bridge	$5 30
Barn expenses	91 79
Building at city yard	3 70
Cemetery street bridge	35
Charles street bridge	1 50
Crawford street bridge	48 88
Eagle street bridge	3 76
Exchange bridge—to repair	15 00
Exchange bridge—to rebuild	1,098 63
Geneva bridge	2 24
Horses, wagons, harnesses, etc	63 12
Mill street bridge	2 25
Park street bridge	1 70
Point street bridge	424 08
Promenade street bridge over Moshassuck river—to build	15 32
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	1,042 25
Salaries—Washington bridge	521 80
Smithfield avenue bridge	4 50
Amount carried forward	$3,376 17

Digitized by Google

Amount brought forward	$3,376 17
Stevens street bridge—to rebuild	148 84
Sundries	84 20
Tar bridge—Manton avenue	2 13
Telephone lines	11 66
Tools	242 65
Valley street bridge—north span	3 99
Valley street bridge—south span	9 08
Veazie street bridge	2 24
Wanskuck bridge	6 05
Washington bridge	150 71
Washington row bridge—to rebuild	11,787 05
West River street bridge	2 26
Weybosset bridge	19 50
Whelden street bridge	1 50
	$15,848 03

Bills deposited with the city treasurer for collection from July 1, to September 30, 1895, inclusive, (for old lumber sold) amounted to . . . $5 00

During the quarter coupons from bills collected (for old lumber sold) have been returned by the city treasurer and receipted for, amounting to $5 00

Bills approved on account of bridges for the fiscal year ending September 30, 1895, inclusive, amounted to $36,621 49

Charged as follows:

Acorn street bridge	$18 00
Atwell's avenue bridge	2 85
Barn expenses	396 87
Branch avenue bridge	3 70
Building at city yard	14 39
Burnside bridge	53 32
Cemetery street bridge	3 29
Central, or Red bridge	291 51
Charles street bridge—to rebuild	79 10
Charles street bridge—to repair	12 52
Crawford street bridge	72 71
Delaine street bridge	87 41
Amount carried forward	$1,035 58

Digitized by Google

Amount brought forward	$1,035 58
Eagle street bridge	5 61
Exchange bridge—to repair	18 82
Exchange bridge—to rebuild	1,098 63
Francis street bridge	64 06
Geneva bridge	10 29
Hawkins street bridge	19 19
Horses, wagons, harnesses, etc	163 97
Lumber, hardware, etc	259 41
Mill street bridge	2 25
Nash lane bridge	4 15
Park street bridge	3 55
Point street bridge	1,476 63
Promenade street bridge over Moshassuck river—to build	15 32
Randall street bridge	172 56
Removing bridge shop to new city yard	1,797 08
Rent of keeper's house, Washington bridge	120 00
Salaries—Central, or Red bridge	1,201 00
Salaries—Point street bridge	3,984 75
Salaries—Washington bridge	1,970 42
Smith street bridge	18 69
Smithfield avenue bridge	9 90
Stevens street bridge—to rebuild	7,175 45
Sundries	427 99
Tar bridge—Manton avenue	2 88
Telephone lines	25 16
Tools	504 40
Valley street bridge—north span	3 99
Valley street bridge—south span	9 08
Veazie street bridge	4 69
Wanskuck bridge	8 55
Washington bridge	2,037 27
Washington row bridge—to rebuild	12,925 01
West River street bridge	3 86
Weybosset bridge	36 60
Whelden street bridge	4 70
	$36,621 49

Bills approved for the construction of the new Red Bridge have been paid from the special appropriation for that work, as follows:

From July 1 to September 30, 1895, inclusive	$35,676 55
For the fiscal year ending September 30, 1895	56,226 39

Digitized by Google

FILLING COVE BASIN.

The bills approved for account of filling the cove basin for the fiscal year ending September 30, 1895, inclusive, amounted to $32,706 54

Charged as follows:

Francis street bridge—to build	$4,675 98
Gaspee street, from Cove to Promenade—to build	10,407 35
Promenade street, from railroad bridge to Gaspee street—to build	17,413 21
Transfer to reservation fund for account of Gaspee street	210 00
	$32,706 54

CONTINGENCIES.

Bills approved for grading and fencing the new city yard, Henderson street, have been paid from the appropriation for contingencies, as follows:

For the quarter ending September 30, 1895, inclusive	$396 00
For the fiscal year ending September 30, 1895, inclusive	5,704 13

ROBERT E. SMITH,

Commissioner.

Digitized by Google

FIFTY-SECOND QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1895.

THE NEW YORK PUBLIC LIBRARY
P 72356

Remington Printing Co., City Printers,
63 Washington Street.
1896.

Digitized by Google

Digitized by Google

FIFTY-SECOND

QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1895.

REMINGTON PRINTING CO., CITY PRINTERS,
63 Washington Street,
1896.

Digitized by Google

RARY
72356

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., January 1, 1896.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-second quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending December 31, 1895:

WATER WORKS.

October 4th, the proposal of H. G. Martin & Co. for installing an electric lighting plant in the Cornish Engine House at Pettaconset Pumping Station was accepted. Amount, $898.00.

October 29th, the rules and regulations governing licensed plumbers and drain layers were amended by increasing the amount of the bond from one thousand dollars to three thousand dollars in order to afford more adequate security to the City of Providence.

October 30th, the proposal of The Babcock & Wilcox Company to furnish two boilers of one hundred horse power each for the Hope Pumping Station, was accepted and a contract subsequently executed. Amount, $5,566.00.

Digitized by Google

December 7th, the offer of General Fire Extinguisher Company to furnish and deliver one thousand service box lock covers was accepted. Amount $290.00.

December 16th, the offer of Coffin Valve Company, of Neponset, Mass., to furnish and deliver in this city the following water gates, fire hydrants, etc., was accepted, namely:

1 16-inch water gate;
3 12-inch water gates;
10 8-inch water gates;
160 6-inch water gates;
10 4-inch water gates;
10 2 1-2-inch water gates;
20 6-inch fire hydrants;
20 hydrant boxes, frames and covers;
10 hydrant boxes with street sprinkler covers.

Amount, $5,090.00.

December 17th, the proposal of Fuller Iron Works to furnish special castings, service boxes, and castings for sewers, required during 1896, was accepted and a contract subsequently executed.

December 18th, the offer of John W. Lyon to furnish and deliver taps, stops and plugs of various sizes, for the year 1896, was accepted. Amount, $1,632.40.

December 20th, the proposal of Warren Foundry and Machine Company, of Phillipsburg, N. J., to furnish and deliver about 1,252 tons of cast iron water pipes, was accepted and a contract subsequently executed. Amount, $27,175.78.

December 24th, the proposal of The Pomroy Coal Company to furnish the teams required for teaming at the city pipe yard during the year 1896, was accepted.

December 27th, the proposal of The Congdon & Carpenter Company to furnish and deliver thirty-four thousand

Digitized by Google

pounds lead pipe, forty thousand pounds pig lead and six hundred and twenty-five pounds pig tin, was accepted. Amount, $2,582.70.

The average daily consumption of water during the last quarter was 8,639,194 gallons, and the average daily consumption for the year 1895 was 8,905,085 gallons.

Water pipes were laid during the quarter as follows:

16-INCH.	
In Brayton avenue	281.15 feet.
8-INCH.	
Land of City of Providence, Town of Cranston	852.48 feet.
6-INCH.	
In Roger Williams Park, Bedford, Berkshire, Cliff, Devine, Eudora, George, Knowles, Lorea, Payton, Royal, Selina, Suffolk, Union and Wayne streets; Doyle, Indiana and Miller avenues; in Chatlett street, town of Johnston; and in Bay View avenue, town of Cranston	7,444.89 feet.
Total	8,578.52 feet.

or 1.624+miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,524.97 feet.
12-inch	85,365.99 feet.
10-inch	14,653.13 feet.
8-inch	246,579.34 feet.
6-inch	1,059,378.24 feet.
Total	1,562,658.33 feet.

or 295.958+miles.

Twenty-one fire hydrants have been set during the quarter, one in each of the following locations:

Albert avenue, Cranston, north side, 247 feet east of Broad street.
Brayton avenue, west side, 146 feet north of West Exchange street.
Chatlett street, Johnston, east side, 213 feet north of Hartford avenue.

Digitized by Google

East avenue, south-east corner of Woodbine street.
Gaspee street, east side, about 190 feet north of Railroad street.
Gaspee street, east side, about 340 feet south of Railroad street.
George street, north side, 228 feet east of Hope street.
Hedley street, south-west corner of Shove street.
Miller avenue, southerly side, about 435 feet westerly from Broad street.
Miller avenue, southerly side, about 1,000 feet westerly from Broad street.
Miller avenue, southerly side, about 1,545 feet westerly from Broad street.
Miller avenue, southerly side, about 2,050 feet westerly from Broad street.
N. Y., N. H. & H. R. R. Co's. freight yard, 115 feet east of Gaspee street.
N. Y., N. H. & H. R. R. Co's. freight yard, 185 feet east of Gaspee street.
N. Y., N. H. & H. R. R. Co's. freight yard, 255 feet east of Gaspee street.
Nichols street, Cranston, north side, about 339 feet east of Norton avenue.
Shaw avenue, Cranston, north-east corner of Broad street.
Silver Spring street, northerly side, 453 feet south-west of Branch avenue.
Sims avenue, east side, 11 feet north of Harris avenue.
Warwick avenue, Cranston, east side, about 480 feet north of Park avenue.
Webster street, Cranston, north-east corner of Bailey street.

One fire hydrant was removed from Gaspee street, 533 feet south of Promenade street.

The total number of fire hydrants is now seventeen hundred—sixteen hundred and thirty-seven flush and sixty-three post hydrants.

During the quarter two hundred and sixty-one water meters were set, of which number fifteen were to replace other meters. The use of sixteen meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1¼-in	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,119	623	148	33	6				3,929
Ball & Fitts, rotary			21	19	2	3	2		47
Crown	6,666	677	177	82	24	12	11		7,649
Fales, Jenks & Sons			1						1
Thomson	1,872	304	67	52	22	7	6	4	2,334
Trident	28								28
Worthington	2	1			1		1		5
	11,687	1,605	414	186	55	22	20	4	13,993

Digitized by Google

Four plumbers' licenses were issued during the quarter, making the total number one hundred and eleven, all of which expire December 31, 1895.

Eight hundred and ninety-six permits to do plumbing work were issued during the quarter.

One hundred and seventy-eight applications for water were made during the quarter, making the total number December 31, 1895, twenty-one thousand and three.

The number of new service stops opened during the quarter was two hundred and fifteen.

The total number of service stops opened to December 31, 1895, inclusive, was twenty thousand two hundred and eighty-eight. The number in actual use December 31, 1895, was eighteen thousand seven hundred and sixty-three.

Digitized by Google

The following table shows the lengths, sizes, etc., of services laid during nineteen years ending December 31, 1895:

YEARS.	Lengths of Services Laid in Feet. Sizes of Pipe. ½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	Totals.	Trenching.	Paving.	Taps Used. ⅜ in.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	Stops Used. ⅜ in.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	Service boxes used.
1877	2,776.8	8,679.3	1,884.4	248 8	114.2	7.	13,710.5	14,422.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878	2,209.8	6,881.8	1,436.6	119.4	120.7	35.3	10,803.6	11,365.38	1,659.34	133	427	91	7	13	671	148	464	91	7	12	722	725
1879	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.40	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880	2.163.6	5,951.2	1,150.	483.6	186.1	16 9	9,951.4	10,468.87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881	1,078.9	6,269.4	741.1	253.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882		8,073.8	581.3	226.4	92.	32.	9,005.5	9,481.5	1,020.		511	49	17	15	592		525	41	15	14	595	610
1883	9.	8,075.83	761.09	143.	131.9	60.	9,180.82	9,649.5	1,284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884		8,048.72	732.2	266.3	119.6	23.2	9,190.02	9,715.5	1,054.6		512	64	18	17	611		539	51	15	13	618	641
1885	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109.5		490	48	11	7	556	1	519	32	5	6	563	586
1886	23.	7,764.6	699.5	115.4	98.6	25 4	8,726.5	9,213.5	965 5		481	64	13	12	570		518	49	7	11	585	609
1887		8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,164.1		516	47	11	11	585		543	32	7	10	592	612
1888		7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5		495	52	9	10	566		519	39	5	10	573	587
1889		9,211.9	514.2	199.	90.2	8.2	10,023.5	10,563.	1,125.5		546	53	18	10	627		579	37	12	6	634	664
1890		8,997.8	671.3	194.7	241.6	61.2	10,166.6	10,792.5	1,183.		549	58	17	16	640		586	42	11	15	654	680
1891		12,531.28	965.5	237.2	311.9	53.5	14,099.38	14,816.	1,445.		729	88	30	24	871		797	66	18	22	903	944
1892		14,672.27	1,284.6	152.9	248.8		16,358.57	17,177.	1,945.5		853	103	22	17	995		943	75	9	17	1,044	1.093
1893		11,153.2	936.5	245.7	248.6		12,584.	13.214.5	1,590.		672	81	24	17	794		727	65	14	16	822	851
1894		12,285.2	756.5	391.4	129.2	15.2	13,577.5	14,129.5	1,643.		724	59	33	12	828		763	47	23	11	844	867
1895		10,258.5	954.2	142.	189.		11,543.7	12,355 5	1,605.		635	68	9	21	733		668	56	6	12	742	767
Totals.	9,919.9	168,812.48	16,620.69	3,949.2	2,837.	457.7	202,596.97	213,326.20	26,207.28	612	10,280	1,278	329	296	12,765	645	10,947	1,055	279	298	13,124	13,496

Digitized by Google

The following table shows the lengths, sizes, etc., of services laid during the year ending December 31, 1895:

Months.	Lengths of Services Laid in Feet.								Taps Used.					Stops Used.					Service boxes used.
	Sizes of Pipe.						Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	Totals.			½ in.	⅝ in.	¾ in.	1 in.	Totals.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	
January	73.3	26.4	20.2			119.9	125.5	43.5	5	2		1	8	5	2		1	8	8
February	16.4		8.2			24.6	27.	3.	2		1		3	2		1		3	3
March	69.4			8.2		77.6	84.	18.	7			1	8	7			1	8	8
April	1,452.3	200.2	23.2	89.4		1,764.11	1,980.5	290.	92	13	2	4	111	99	11	1	3	114	119
May	1,096.	113.2	76.4	30.4		1,316.	1,320.5	188.	75	6	2	2	85	75	6	2	2	85	85
June	1,305.4	155.6	14.	18.2		1,493.2	1,651.	184.5	88	10	3	3	104	94	8	2	1	105	110
July	1,314.2	116.2				1,430.4	1,492.	237.	79	8			87	81	6			87	89
August	1,074.2	65.2		16.4		1,155.8	1,209.	153.	58	6		3	67	61	6		2	69	70
September	1,216.	77.		18.2		1,311.2	1,371.	123.	68	6		5	79	70	5		1	76	81
October	1,433.7	36.6				1,470.3	1,537.	116.	80	4		1	85	84	3			87	89
November	702.2	137.6		8.2		848.	1,000.	172.	50	10	1	1	62	58	8		1	67	70
December	505.4	26.2				531.6	558.	77.	31	3			34	32	1			33	35
Totals	10,258.5	954.2	142.	189.		11,543.7	12,355.5	1,605	635	68	9	21	733	668	56	6	12	742	767

Digitized by Google

Changes in size and location of services in 1895:

Taps and Stops.										Sizes and Lengths of Lead Pipe.										Trenching.	Paving	Change in size only.	Change in location only.	Changes in both size and location.	Change in length.
Taken Out.					Inserted.					Taken Out.					Inserted.										
⅜ inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	¾ inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	⅝ inch.	¾ inch.	1 inch	1¼ inch.	1½ inch.						
123	19	7	1	1		99	8	12	11	1,458.34	250.7	66.9	22.6	7.9	1,172.5	132.2	168.6	169.9		2,619.9	400.8	111	4	13	36

23 services have been removed.

Digitized by Google

The following table exhibits the number of service stops opened each month from the commencement to December 31, 1895:

Months.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895
January.	...	54	33	21	34	55	15	49	9	20	7	17	15	21	17	18	26	7	39	36	39	56	40	29	30
February	...	47	18	18	7	25	23	18	9	19	3	11	9	10	7	15	7	10	21	25	26	23	24	28	8
March.	...	38	34	63	7	45	32	60	19	46	23	39	11	28	9	24	16	14	19	28	24	28	36	40	27
April.	..	109	109	108	32	108	82	78	52	58	55	49	55	62	48	68	60	38	61	53	73	76	71	76	67
May	...	224	206	147	162	168	136	95	80	84	66	72	78	62	62	61	70	52	74	66	114	83	91	81	79
June.	...	329	295	151	172	148	114	103	71	109	82	48	64	81	81	59	50	86	59	80	83	103	106	105	100
July	...	333	261	127	141	158	83	80	49	75	56	77	66	76	77	83	62	89	74	67	85	105	93	80	89
August	...	224	209	123	83	94	91	51	51	39	58	87	69	61	57	71	49	52	56	76	95	104	115	116	83
September	...	184	147	139	101	94	80	63	44	37	60	67	93	50	70	59	74	63	64	77	93	114	88	112	70
October	...	138	135	160	92	84	81	78	79	48	61	56	47	65	62	52	80	70	64	54	104	102	96	85	90
November	..	100	104	185	86	54	73	57	63	54	37	64	49	51	39	57	69	47	58	72	81	118	80	70	68
December.	56	83	45	122	60	35	55	45	47	29	40	27	56	44	46	28	49	42	53	50	83	102	62	62	57
Totals	56	1,863	1,596	1,364	977	1,068	865	777	573	618	548	614	612	611	575	595	612	570	642	684	900	1,014	902	884	768

Digitized by Google

The receipts for water each year since the commencement have been as follows:

Year.	Amount.	Year.	Amount.
1872	$41,003 51	1884	$302,368 36
1873	97,386 09	1885	313,561 21
1874	132,052 39	1886	323,084 67
1875	165,144 71	1887	339,513 60
1876	183,868 73	1888	346,731 58
1877	200,039 39	1889	377,497 97
1878	218,883 33	1890	401,140 86
1879	229,551 78	1891	404,553 84
1880	247,705 06	1892	409,421 21
1881	260,530 87	1893	427,546 51
1882	269,318 77	1894	432,383 97
1883	283,632 89	1895	471,069 97

The amount of bills approved on account of water works from October 1 to December 31, 1895, inclusive, was:

For construction and extension . . . $6,448.81

Classified as follows:

Laying water pipe	$3,055 14
Laying service pipe	918 23
Fire hydrants, boxes and covers	754 75
Special castings	619 28
Barn expenses	264 77
Wharf salaries	192 50
Stop valves	168 70
Taps and stops	166 86
Labor on and carting pipe	125 62
Horses, wagons, harnesses, etc	78 76
Tools	51 76
Sundries	29 82
Repairs on pipe yard buildings	16 07
Cast iron water pipe	6 55
	$6,448 81

Digitized by Google

For maintenance $26,574.62

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$4,259 00	
Sundries	968 63	
Engineers	534 79	
Firemen	469 80	
Superintendence	292 43	
Lights	172 04	
Oil, waste and packing	93 08	
Real estate	69 05	
Labor on fuel	64 20	
Corliss pumping engine and house	59 85	
Worthington high duty pumping engine	53 17	
Barn expenses	50 55	
Worthington pumping engine	50 28	
Care of grounds	19 80	
Cornish engine house	9 95	
Cornish pumping engine	48	
		$7,167 10

SOCKANOSSET RESERVOIR.

Watchman	$180 00	
Sundries	27 22	
		207 22

HOPE PUMPING STATION.

Engineers	$562 61	
Firemen	409 40	
Sundries	248 94	
Lights	106 99	
Care of grounds	50 75	
Hope pumping engine No. 2	26 52	
Coal and wood	17 24	
Oil, waste and packing	13 00	
		1,435 45

HOPE RESERVOIR.

Watchman	$200 25	
Sundries	10 17	
		210 42

Amount carried forward	$9,020 19

Digitized by Google

Amount brought forward		$9,020 19

FRUIT HILL RESERVOIR.

Sundries	$499 13	
Watchman	202 50	
		701 63

PIPE LINE AND SERVICE STOPS.

Repairs	$2,456 28	
Superintendence—salaries	884 28	
Chambers street	1,602 25	
		3,340 56

METER DEPARTMENT.

Water meters	$4,771 28	
Setting and repairing meters	1,504 75	
		6,276 03

MISCELLANEOUS.

Town of Cranston tax	$5,069 68	
Clerks' and inspectors' salaries	834 79	
Town of North Providence tax	400 00	
Prevention of defilement of the Pawtuxet	342 58	
Barn expenses	219 72	
Horses, wagons, harnesses, etc	111 74	
Analyses of water	90 00	
Pipe yard, office expenses	86 62	
Sundries	56 88	
Town of Lincoln tax	21 00	
Telephone lines	3 20	
		7,236 21
		$26,574 62

The amount of expenditures from October 1 to December 31, 1895, inclusive, was . $33,023.43

The total expenditures to December 31, 1895, inclusive, were $8,186,296.88

The *net* expenditure for construction and extension to December 31, 1895 inclusive, was	$6,119,085 39
The *net* expenditure for maintenance from October 1 to December 31, 1895, inclusive, was	$19,177 62
The *net* expenditure for maintenance to December 31, 1895, inclusive, was	$1,300,047 41

Digitized by Google

Bills deposited with the city treasurer for collection from October 1 to December 31, 1895, inclusive, amounted to . . . $73,089.50

As follows:

Water	$59,259 16
Water meters	5,448 50
Setting and repairing meters	1,770 30
Rent of real estate	168 00
Permanently closing service stops	25 00
Examination and repairs of pipe line	16 50
Penalties	13 00
Labor and material, laying service pipes, etc	6,235 48
Old lead	255 00
	$73,190 94

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $73,089.50

As follows:

Water	$58,883 96
Water meters	5,430 80
Setting and repairing meters	1,761 20
Rent of real estate	168 00
Permanently closing service stops	20 00
Examination and repairs of pipe line	17 00
Penalties	15 00
Labor and material, laying service pipes, etc	6,263 54
Second-hand hoisting engine	275 00
Old lead	255 00
	$73,089 50

SEWERS.

During the quarter ending December 31, 1895, three hundred and seventy-one permits were issued to drain layers—two hundred and fifty-four for new work and one hundred and seventeen for extension and repairs of drains.

December 19th, the proposal of Charles M. Kelly to furnish the cement required by the department of public works during the year 1896, delivered on the work, was accepted and a contract subsequently executed.

Digitized by Google

Sewers Built in Miles, to December 31, 1895.

ITEMS.	Kind.	Built Previous to 1895.	Built During 1895.	Total to Dec. 31, 1895.
Under regular appropriation	Brick.	30.348	.278	30.626
Under regular appropriation	Pipe.	93.161	6.011	99.172
Under improved sewerage appropriation	Brick and Pipe.	18.238	1.553	19.791
Total miles of sewers		141.747	7.842	149.589

In addition to the above there was also built 1,405.25 lineal feet of 48-inch brick storm sewer.

During the year 131 catch-basins and 85 extra inlets have been built, making a total to December 31, 1895, of 3,643 catch-basins and 904 extra inlets.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Plum street	$624 73
Marlborough and Frank streets	2,026 74
Brattle street	384 25
Pomona avenue	1,005 72
Bolander street	1,153 21
Willow, Ellery, Hudson and Wood streets	6,145 85
Taylor street and Reynolds avenue	2,451 58
Barton street	2,116 17
Hendrick street	2,793 89
Harris and Sims avenues	7,185 00
Chambers street	1,602 25
Cranston street	1,787 75
Lexington avenue	1,649 11
Linwood avenue	4,100 43
Total	$35,026 68

Digitized by Google

October 28th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To George R. Newman & Co.

No. of resolution.	Date of approval.		
453.	Oct. 8, 1895.	*Pierce street, from Courtland to Marshall,*	$251 61
454.	" " "	*Stanwood street, from Hamilton to Public,*	1,005 07
466.	" 18, "	*Andem street, from Academy avenue to Canton street,* . .	621 07

To William H. Sherman.

467.	Oct. 18, 1895,	*Norwich avenue, from Broad street to Baxter,* . . .	$846 52
468.	" " "	*Wellington street, from East Beacon to Pearl,* . . .	385 14

November 13th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

Digitized by Google

To George R. Newman & Co.

No. of resolution.	Date of approval.		
496.	Nov. 5, 1895.	*Goddard street, from Douglas avenue to Candace street,*	$2,097 54

To William H. Sherman.

492.	Nov. 5, 1895.	*Althea street, from Cranston to Union avenue,*	$1,262 28
497.	" " "	*Sycamore street, from near Willow to Hudson,* . .	246 58

November 30th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

To George R. Newman & Co.

No. of resolution.	Date of approval.		
523.	Nov. 22, 1895.	*Van Zandt street, from Jackson avenue to Hamburg,* .	$522 50

December 4th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

To William H. Sherman.

No. of resolution.	Date of approval.		
530.	Dec. 3, 1895.	*Rhode Island and Grand avenues,* .	$1,608 72

Digitized by Google

December 26th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

TO FREDERICK E. SHAW.

No. of resolution.	Date of approval.				
545.	Dec.	17,	1895,	*Francis street, northerly from West Exchange street,* . .	$2,173 10

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
406.	July	15,	1889,	*Section* 3, *Disposal Division,* . . .	Nov. 4, 1895.
406.	"	"	"	*Section* 4, *Disposal Division,* . . .	Nov. 16, 1895.
521.	Sept.	25,	1894,	*Section* 15, *Siphon Division,* . . .	Dec. 7, 1895.
521.	"	"	"	*Section* 16, *Siphon Division,* . . .	Dec. 21, 1885.
377.	Aug.	20,	1895,	*Harris avenue, from Acorn street to the Woonasquatucket river,*	Dec. 9, 1895.
395.	"	30,	"	*Adelaide avenue, from near Melrose street to Hamilton,*	Oct. 30, 1895.
396.	"	"	"	*Chester avenue, from Milk street to Prairie avenue,* .	Nov. 1, 1895.

Digitized by Google

No. of resolution.	Date of approval.				Date of completion.
397.	Aug.	20,	1895,	*Roger Williams Park, Miller avenue and Broad street,*	Oct. 26, 1895.
453.	Oct.	8,	"	*Pierce street, from Courtland to Marshall,*	Nov. 14, 1895.
454.	"	"	"	*Stanwood street, from Hamilton to Public,*	Nov. 11, 1895.
466.	"	18,	"	*Andem street, from Academy avenue to Canton street,* .	Nov. 22, 1865.
467.	"	"	"	*Norwich avenue, from Broad street to Baxter,* . . .	Nov. 22, 1895.
468.	"	"	"	*Wellington street, from East Beacon to Pearl,* . . .	Nov. 8, 1895.
492.	Nov.	5,	"	*Althea street, from Cranston to Union avenue,*	Dec. 12, 1895.
496.	"	"	"	*Goddard street, from Douglas avenue to Candace street,*	Dec. 16, 1895.
497.	"	"	"	*Sycamore street, from near Willow to Hudson,* . . .	Nov. 26, 1895.
523.	"	22,	"	*Van Zandt street, from Jackson avenue to Hamburg,* .	Dec. 23, 1895.

Digitized by Google

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
564.	Sept. 23, 1893,	*Section* 10, *Allen's avenue Division.*
521.	" 25, 1894,	*Section* 18, *Moshassuck River Division.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.	
530.	Dec. 3, 1895,	*Rhode Island and Grand avenues.*
545.	" 17, "	*Francis street, northerly from West Exchange street.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced December 31, 1895, namely:

No. of resolution.	Date of approval.	
505.	Nov. 8, 1895,	*Elmgrove, Irving and Wayland avenues.*
571.	Dec. 20, "	*Dexter street, from Miller to Cranston.*
572.	" " "	*Moshassuck River and West River Divisions, Improved Sewerage System.*

Digitized by Google

SEWER MAINTENANCE DEPARTMENT.

The following table shows the work performed by the department cleaning sewers, basins and drains for the year 1895:

Months.	Old Work.									New Work.							Total deposit removed, cubic yards.
	Old Drains.			Sand Catchers.		Open Ditches.				Sewers.				Catch-Basins.			
	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.		Number.	Length in feet.	Deposit removed, cu. yds.	Dead ends.	No. times examined.	Number cleaned.	Deposit removed, cu. yds.	
January														1	238	244.14	244.14
February										1				1	16	18.36	18.36
March										2		357.80		2	486	564.14	921.94
April										10		8.90		2	595	823.25	832.15
May	1	100	8.30			1	175	35.20		2	500	17.80		1	967	894.90	956.20
June										1	150	54.85		1	741	811.33	866.18
July										27	4,100	6.50	40	1	1,106	1,721.50	1,728.00
August										25	3,800	13.00	70	2	1,885	1,936.95	1,949.95
September										13	1,800	108.00		1	1,451	1,321.60	1,429.60
October										2	2,600	644.20		2	860	893.05	1 537.25
November	1	200	29.65							1	3,150	364.45		1	593	1,072.10	1,466.20
December						6	700	103.00		1	1,500	148.25		1	840	999.35	1,250.60
Totals	2	300	37.95			7	875	138.20		85	17,600	1,723.75	110	16	9,778	11,300.67	13,200.57

Digitized by Google

The amount of bills approved on account of sewers from October 1 to December 31, 1895, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$ 48,024 14	
Improved sewerage appropriation	145,084 79	
		$193,108 93

Charged as follows:

Material	$10,902 79
Salaries of assistant engineers	2,853 64
Contract reservations	2,838 00
Testing cement	375 20
Sundries, improved sewerage system	322 46
Additional catch-basins	267 03
Sundries	102 36
Tools	2 00
Sewer in Adelaide avenue from near Melrose street to Hamilton	421 91
Sewer in Althea street, from Cranston to Union avenue	1,318 06
Sewer in Andem street, from Academy avenue to Carleton street	688 97
Sewer in Chester avenue, from Milk street to Prairie avenue	255 69
Sewer in Francis street, northerly from West Exchange	16 53
Sewer in Goddard street, from Douglas avenue to Candace street	2,252 19
Sewer in Harris avenue, from Acorn street to Woonasquatucket river	26,751 90
Sewer in Norwich avenue from Broad street to Baxter.	945 66
Sewer in Pierce street from Courtland to Marshall	276 65
Sewer in Rhode Island and Grand avenues	1,852 61
Sewer in Roger Williams Park, Miller avenue and Broad street	2,907 27
Sewer in Stanwood street, from Hamilton to Public	1,105 48
Sewer in Sycamore street from near Willow to Hudson	255 75
Sewer in Van Zandt street from Jackson avenue to Hamburg	593 46
Sewer in Wellington street, from East Beacon to Pearl	406 65
Sewer in Allen's avenue Division, Section 10	9,106 09
Sewer in Allen's avenue Division, Section 11	6,305 94
Sewer in Disposal Division, Section 3	4,507 88
Sewer in Moshassuck river Division, Section 17	7,988 35
Sewer in Moshassuck river Division, Section 18	36,488 83
Amount carried forward	$122,109 35

Digitized by Google

Amount brought forward	$122,109 35	
Sewer in Norfolk and Station streets	561 46	
Sewer in Siphon Division, Section 15	4,022 11	
Sewer in Siphon Division, Section 16	8,962 30	
Brick buildings and chimney for sewage pumping station	36,544 37	
Foundation for sewage pumping station	11,379 66	
Grading Norfolk street from Oak to Cranston	5,720 14	
Holly sewage pumping engines	13 19	
Steel roof for sewage pumping station	3,796 35	
		$193,106 93

For maintenance. $8,955 81

Charged as follows:

Cleaning basins and sewers	$4,356 04	
Repairing basins and sewers	1,465 47	
Inspection of connections	768 28	
Cleaning and repairing old drains	661 84	
Tools	412 61	
Salary, superintendent	385 00	
Barn expenses	369 88	
Horses, wagons, harnesses, etc	361 57	
Cleaning private connections	52 60	
Office expenses	46 37	
Filling cisterns, etc	37 10	
Sundries	30 30	
Removing buildings to new city yard	8 75	
		$8,955 81

The *net* expenditure for construction of sewers to December 31, 1895, inclusive, was $5,587,730 99

The *net* expenditure for maintenance of sewers to December 31, 1895, inclusive, was $469,614 14

Bills deposited with the city treasurer for collection from October 1 to December 31, 1895, inclusive, amounted to $823 86

As follows:

Cleaning private connections	$ 82 25	
Filling cisterns, etc	44 95	
Sewer material	672 40	
Laying drains to curbstones	24 26	
		$823 86

Digitized by Google

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $708 61

As follows:

Cleaning private connections	$ 82 25	
Filling cisterns, etc	41 20	
Sewer material	560 90	
Laying drains to curbstones	24 26	
		$708 61

HIGHWAYS.

Four permits to open streets were issued during the quarter.

November 4th, the offer of F. Coggeshall to furnish and set a hot water heater and appurtenances for heating the city barn at the corner of Henderson and Eddy streets, was accepted. Amount, $566.00.

November 20th, the offer of W. C. Oastler to furnish a fifteen gross ton Aveling & Porter steam road roller and to receive in part payment therefor the twelve-ton Aveling & Porter steam road roller furnished the city in 1883, was accepted.

November 21st, the offer of Smithfield Granite Co. to furnish and deliver granite paving blocks, was accepted.

November 22d, the offer of Beaton Brothers to furnish and deliver granite paving blocks, was accepted.

November 25th, the offer of Garvey Brothers to furnish and deliver granite paving blocks, was accepted.

December 9th, the proposal of Edward W. Everson to furnish and lay hydraulic cement concrete foundation for granite block pavement in Washington street and Harris avenue, was accepted and a contract subsequently executed.

Digitized by Google

In addition to the general patching necessary to maintain the streets in good repair, the following work has been done during the year ending December 31, 1895, namely:

New streets built	34,000	lineal feet.
Curbing set	50,456	lineal feet
Streets rebuilt	3,850	lineal feet.
Streets re-surfaced	76,450	lineal feet.
Streets graded	31,100	lineal feet.
Block pavement laid	64,277	square yards.
Asphalt pavement laid	29,788	square yards.
Cobble pavementlaid	4,000	square yards.
Block paving relaid	8,200	square yards.
Concrete gutters and roadways built	8,567	square yards.
Asphalt gutters and roadways built	2,181	square yards.
Concrete sidewalks laid	12,506	square yards.
Concrete sidewalks patched and top dressed	4,547	square yards.
Crushed stone used	52,932	tons.
Screened gravel used	9,932	cubic yards.

During the quarter the following work was completed:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
May 16, 1895.	*Miller avenue, from Broad street to its westerly termination.*
" " "	*Kinsley avenue, from Gaspee street to Harris avenue.*
" " "	*West River street, from Branch avenue to bridge north of McKenna street.*
" " "	*Silver Spring street, from Branch avenue to Charles street.*
June 20, "	*Rhodes street, from Eddy to Allens avenue.*
Sept. 19, "	*Reynolds avenue, from Broad street to Taylor.*
Oct. 17, "	*Aborn street, west side, from Cedar to West Exchange.*

Digitized by Google

To Grade.

No. of resolution.	Date of approval.			
50.	Jan.	19,	1894,	*Norfolk street, from Oak to Cranston.*

To Build.

151.	April	5,	1895,	*Miller avenue, from Broad street to its westerly termination.*
255.	June	7,	"	*East avenue, from Olney street to Rochambeau avenue.*
331.	"	27,	"	*East River street, including Waterman street, to the new bridge.*

To be Paved with Granite Blocks.

614.	Nov.	20,	1894,	*Traverse street, from Wickenden to Pike.*
151.	April	5,	1895,	*Orange street, from Weybosset to Dyer.*
151.	"	"	"	*Pine street, from Beacon avenue to Hay street.*
151.	"	"	"	*Dyer street, from Ship to the end of the pavement near Friendship.*

To Concrete Sidewalks.

417.	Sept.	19,	1895,	*Cushing street, from Prospect to Hope.*
417.	"	"	"	*Walker street, from Westminster to Washington.*
417.	"	"	"	*Walnut street, from Westminster to Washington.*
417.	"	"	"	*Elm street, from Hoppin to Butler.*

Digitized by Google

No. of resolution.	Date of approval.	
417.	Sept. 19, 1895.	*Olney street, from North Main to East avenue.*
417.	" " "	*Williams street, from Benefit to South Main.*
417.	" " "	*Broad street, from Trinity Square to the city line.*
417.	" " "	*Point street, from Friendship to Plain.*
417.	" " "	*Burrill street, from Westminster to Weybosset.*
417.	" " "	*Carrington avenue, from Camp street to East avenue.*
417.	" " "	*Bacon street, from North Main to Camp.*
417.	" " "	*Arlington avenue, from Angell street to Irving avenue.*

The following work was in progress December 31, 1895, viz.:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895.	*Harris avenue, from Kinsley to Acorn street, and from Acorn to Eagle:*—one-half completed.

TO BRING TO SUB-GRADE AND PUT IN GOOD CONDITION.

No. of resolution.	Date of approval.	
518.	Sept. 25, 1894.	*Washington avenue, from Broad street to Maryland avenue.*
518.	" " "	*Massachusetts avenue, from Broad street to Maryland avenue.*
518	" " "	*Virginia avenue, from New York avenue to Montgomery.*

Digitized by Google

To Build.

No. of resolution.	Date of approval.	
331.	June 27, 1895,	*Pitman street, from Wayland avenue to East River street:*—nearly completed.

To be Paved with Granite Blocks.

151.	April 5, 1895,	*Kinsley avenue, from Gaspee street to Harris avenue:*—nearly completed.
151.	" " "	*Harris avenue, from Kinsley to Eagle street:*—one-half completed.
151.	" " "	*Peck street, from Weybosset to Dyer:*—one-half completed.
151.	" " "	*Hay street, from Weybosset to Friendship:*—one-half completed.

To Concrete Sidewalks.

417.	Sept. 19, 1895,	*Cranston street, from Messer to the city line.*
417.	" " "	*Washington avenue, from Broad street to Maryland avenue.*

The following work, ordered by the Board of Aldermen and City Council, had not commenced December 31, 1895, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
May 16, 1895,	*Francis street, from Cove street and Exchange place to Gaspee street.*
" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*

Digitized by Google

Date of order.			
June	20,	"	*Autumn street, from Eddy to Rugby.*
"	"	"	*Frank street, from Plain to Beacon avenue.*
"	"	"	*Gordon avenue, from Oxford street to Gallup.*
Sept.	19,	1895.	*Huntington avenue, from Cranston street to Union avenue.*
"	"	"	*River avenue, from Chalkstone to the brook on River avenue.*
"	"	"	*Forest street, from Ivy to East avenue.*
"	"	"	*Greeley street, from Charles to Opper.*
"	"	"	*Linwood avenue, from Cranston street to Union avenue.*
"	"	"	*Lisbon street, from Chalkstone avenue to Regent.*
"	"	"	*Marlborough street, from East Beacon to Pearl.*
"	"	"	*Wood street, from Ellery to Huntington avenue.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.			
151	April	5,	1895.	*Gaspee street, from Cove to the railroad bridge abutment.*
151.	"	"	"	*Gaspee street, from Kinsley avenue to first angle east of Francis street.*
151.	"	"	"	*Francis street, from Cove and Exchange place to Gaspee street.*
151.	"	"	"	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*

Digitized by Google

No. of resolution.	Date of approval.	
151.	April 5, 1895.	*The two approaches to the proposed depot in Exchange place.*
151.	" " "	*Washington street, from Eddy to Walker.*

TO BE PAVED WITH GRANITE BLOCKS AND COBBLE STONES.

543.	Dec. 17, 1895.	*Eddy street, from Henderson to Public.*

TO RE-BUILD.

282.	June 15, 1895.	*Benefit street, from Wickenden to North Main.*

TO PURCHASE, ERECT AND MAINTAIN.

271.	June 7, 1895,	*Six public urinals in central part of the city.*

TO CONCRETE SIDEWALKS.

417.	Sept. 19, 1895.	*Angell street, from Prospect to Benefit.*
417.	" " "	*Transit street, from Brook to Hope.*
417.	" " "	*Livingstone street, from West River to North Main.*
417.	" " "	*South Main street, from Power to Transit.*
417.	" " "	*Oriole avenue, from Butler to Grand.*
417.	" " "	*Taber avenue, from Angell street to Irving avenue.*

Digitized by Google

No. of resolution.	Date of approval.	
417.	Sept. 19, 1895,	*East Manning street, from Governor to Wayland avenue,*
417.	" " "	*Pine street, from Beacon avenue to Hay street.*

Bills approved on account of highways from October 1 to December 31, 1895, inclusive, amounted to:

Regular appropriation	$70,051 97	
Special appropriation	70,225 86	
Special credit appropriation	4,153 35	
		$144,431 18

Classified as follows:

Repairs on unpaved streets	$20,023 97	
Crushed stone, material and labor	14,640 17	
Cleaning streets	12,392 91	
Tools, implements, etc	4,313 40	
Barn expenses	2,677 04	
Labor on materials	1,941 84	
Blacksmith and wheelwright shop	1,590 81	
Screening gravel	1,451 17	
Repairs on paved streets	1,442 13	
Repairs on stone crushers	795 01	
Steam rollers, repairs and supplies	604 97	
Salaries—Superintendent and clerks	436 33	
Building driveways, etc	409 99	
Removing snow and ice	212 10	
Watchman at city yard	154 00	
Sundries	153 48	
Fencing streets, material and labor	142 71	
Horses, wagons, harnesses, etc	103 72	
Office expenses, city yard	89 75	
Watering streets	32 00	
		$63,607 50

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Aborn street, from Cedar to West Exchange	$1,224 36	
Avenue deeded to the city, adjoining Roger Williams Park, from Broad street to its westerly termination	4,667 72	
Fruit street, from Broad to Gordon avenue	114 50	
Amounts carried forward	$6,006 58	$63,607 50

Digitized by Google

Amounts brought forward	$6,006 58	$63,607 50
Kinsley avenue, from Gaspee street to Harris avenue	2,845 25	
Linwood avenue, from Cranston street to Union avenue	247 10	
Orchard street, from Oxford to Fruit	44 62	
Plum street, from Oxford to Fruit	42 16	
Reynolds avenue, from Broad street to Taylor	1,805 80	
Rhodes street, from Eddy to Allen's avenue	1,609 68	
River avenue, from Chalkstone to the brook on River avenue	1,557 53	
Silver Spring street, from Branch avenue to Charles street	3,065 41	
Sims avenue, from Harris to Kinsley	1,302 09	
West River street, from Branch avenue to bridge north of McKenna street	1,719 95	
		20,246 17

PAVE WITH GRANITE BLOCKS.

Clifford street, from Richmond to Dyer	$2,637 88	
Cove street, from Sabin to West Exchange	16,176 84	
Dorrance street, from end of pavement near Pine to Dyer	3,560 92	
Dyer street, from Ship to end of pavement near Friendship	2,634 73	
Friendship street, from Chestnut to Dyer	3,311 87	
Harris avenue, from Kinsley to Eagle street	2,786 01	
Hay street, from Weybosset to Friendship	342 84	
Orange street, from Weybosset to Dyer	969 95	
Peck street, from Weybosset to Dyer	742 33	
Pine street, from Beacon avenue to Hay street	5,195 20	
Traverse street, from Wickenden to Pike	2,648 98	
Washington street, from Eddy to Walker	2,366 65	
		43,374 20

TO GRADE AND PUT IN GOOD CONDITION.

Massachusetts avenue, from Broad street to Maryland avenue	$2,426 50	
Maryland avenue, from New York to Massachusetts	287 86	
Virginia avenue, from New York to Montgomery	158 08	
Washington avenue, from Broad street to Maryland avenue	1,280 91	
		4,153 35

BUILD.

East avenue, from Olney street to Rochambeau avenue	$6,969 87	
East River street, including Waterman, to the new bridge	2,005 73	
Pitman street, from Wayland avenue to East River street	4,066 36	
		13,041 96

REBUILD.

Benefit street, from Wickenden to North Main		8 00
		$144,431 18

Digitized by Google

Bills deposited with the city treasurer for collection from October 1 to December 31, 1895, inclusive, amounted to $10,359 09

As follows:

Union Railroad Co., for granite blocks, etc	$5,115 27
New York, New Haven & Hartford Railroad Co., for granite blocks, etc	3,056 00
Labor and material	2,048 96
Manure from barn	75 00
Discharging cargoes at city wharf	57 76
Old pulley	4 00
Old barrels	2 10
	$10,359 09

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $19,455 57

As follows:

Union Railroad Co., for granite blocks, etc	$15,677 63
Labor and material	2,016 41
New York & New England Railroad Co., for granite blocks, etc	1,314 67
New York, New Haven & Hartford Railroad Co., for granite blocks, etc	308 00
Manure from barn	75 00
Discharging cargoes at city wharf	57 76
Old pulley	4 00
Old barrels	2 10
	$19,455 57

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from October 1 to December 31, 1895, inclusive, amounted to $11,719 72

Digitized by Google

Charged as follows:

Granite curbing	$8,085 03
Concreting sidewalks	3,634 69
	$11,719 72

Curbing bills deposited with the city treasurer for collection from October 1 to December 31, 1895, inclusive, amounted to $319 75

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $648 15

CITY ENGINEER.

Bills approved on account of the city engineer's department from October 1 to December 31, 1895, inclusive, amounted to $12,348 69

Charged as follows:

Salary—city engineer	$1,500 00
Salaries of assistants	9,282 80
Salaries of clerks	713 96
Carfares	440 60
Supplies—drawing materials, etc	361 70
Instruments and repairs	19 95
Sundries	17 53
Meteorological instruments and repairs	10 15
Horse hire, barn expenses, etc	2 00
	$12,348 69

Bills deposited with the city treasurer for collection from October 1 to December 31, 1895, inclusive, amounted to $3 52

Digitized by Google

As follows:

Blue process paper	$2 28
Steel tapes	69
Tracing cloth	55
	$3 52

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $3 52

As follows:

Blue process paper	$2 28
Steel tapes	69
Tracing cloth	55
	$3 52

BRIDGES.

October 29th, the offer of L. R. Titus to raise the brick building at the west end of the new Central Bridge and place it in as good condition as at present, was accepted. Amount, $475.00.

October 30th, the proposal of the Narragansett Improvement Company to furnish and lay an asphalt pavement at the new Central Bridge and Washington Row Bridge in accordance with the plans and specification of the City Engineer, was accepted and a contract subsequently executed. Amount, $6,131.00.

November 12th, the offer of John W. Watson & Son for building the motor house for the new Central Bridge, was accepted. Amount, $575.00.

November 29th, the offer of Fuller Iron Works to furnish and erect the guard gates at the new Central Bridge, was accepted. Amount, $3,400.00.

Digitized by Google

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.			
48.	Jan.	19,	1894,	*New City Yard, Henderson street:* —to grade and fence.
511.	Sept.	25,	"	*Red Bridge, over the Seekonk river:*—nearly completed.
89.	Feb.	26,	1895,	*Washington row bridge:*—nearly completed.
252.	June	7,	"	*Promenade street bridge, over the Moshassuck river:*—pier completed.
346.	July	10,	"	*Exchange bridge, over the Providence river:*—abutments and piers in progress.

Bills approved on account of bridges from October 1 to December 31, 1895, inclusive, amounted to $21,121 09

Charged as follows:

Barn expenses	$ 102 67
Building at city yard	12 88
Crawford street bridge	4 27
Exchange bridge—to rebuild	10,908 96
Horses, wagons, harnesses, etc	45 05
Lumber, hardware, etc	88 20
Point street bridge	158 16
Promenade street bridge over Moshassuck river—to build	1,909 31
Rent of Keepers house, Washington bridge	30 00
Salaries—Point street bridge	966 75
Salaries Washington bridge	470 42
Sundries	138 63
Tools	46 40
Wanskuck bridge	13 05
Washington bridge	124 53
Washington row bridge—to rebuild	6,101 81
	$21,121 09

Digitized by Google

Bills approved from October 1 to December 31, 1895, inclusive, for the construction of the new Red Bridge have been paid from the special appropriation for that work to the amount of $21,783 01

PUBLIC WORKS OFFICE.

Bills approved from October 1 to December 31, 1895, inclusive, for account of public works office, amounted to $5,344 52

Charged as follows:

Salaries of commissioner and secretary	$1,925 00	
Salaries of office assistants	3,314 33	
Office supplies	105 19	
	$5,344 52	

CONTINGENCIES.

Bills approved from October 1 to December 31, 1895, inclusive, for grading and fencing the new city yard, Henderson street, have been paid from the appropriation for contingencies, to the amount of $39 38

FILLING COVE BASIN.

Bills approved from October 1 to December 31, 1895, inclusive, for building Promenade street bridge over the Moshassuck river, have been paid from the appropriation for filling the cove basin, to the amount of $5,580 28

ROBERT E. SMITH,

Commissioner.

Digitized by Google

1896.] CITY DOCUMENT. [No. 21.

FIFTY-THIRD QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING, MARCH 31, 1896.

THE NEWBERRY LIBRARY
72357

REMINGTON PRINTING CO., CITY PRINTERS,
63 Washington Street.
1896.

Digitized by Google

Digitized by Google

FIFTY-THIRD QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING, MARCH 31, 1896.

REMINGTON PRINTING CO., CITY PRINTERS,
63 Washington Street,
1896.

Digitized by Google

THE NEW
PUBLIC LIB
P 72357
ASTOR, LEN
TILDEN FO
19

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., April 1, 1896.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-third quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending March 31, 1896:

WATER WORKS.

The average daily consumption of water during the last quarter was 9,250,374 gallons.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,524.97 feet.
12-inch	85,365.99 feet.
10-inch	14,653.13 feet.
8-inch	246,579.34 feet.
6-inch	1,059,378.24 feet.
Total	1,562,658.33 feet.

or 295.958+miles.

The total number of fire hydrants is now seventeen hundred—sixteen hundred and thirty-seven flush and sixty-three post hydrants.

Digitized by Google

During the quarter one hundred and eighty-nine water meters were set, of which number eight were to replace other meters. The use of five meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1 in.	1½-in	2 in.	3 in.	4 in.	6 in.	
Ball & Fitts, piston	3,141	623	149	33	6				3,952
Ball & Fitts, rotary			21	18	2	3	2		46
Crown	6,735	676	178	82	24	12	11		7,718
Fales, Jenks & Sons			1						1
Thomson	1,937	318	73	52	22	7	6	4	2,419
Trident	28								28
Worthington	2	1			1		1		5
	11,843	1,618	422	185	55	22	20	4	14,169

Ninety-two plumbers' licenses were issued during the quarter, all of which expire December 31, 1896.

Five hundred and forty-eight permits to do plumbing work were issued during the quarter.

Forty-one applications for water were made during the quarter, making the total number, March 31, 1896, twenty-one thousand and forty-four.

The number of new service stops opened during the quarter was seventy-five.

The total number of service stops opened to March 31, 1896, inclusive, was twenty thousand three hundred and sixty-three. The number in actual use March 31, 1896, was eighteen thousand seven hundred and sixty-one.

The amount of bills approved on account of water works from January 1 to March 31, 1896, inclusive, was:

Digitized by Google

For construction and extension, . . . $34,048 22

Classified as follows:

Cast iron water pipe	$19,410 56	
Stop valves	2,999 05	
Worthington high-duty pumping engine	2,500 00	
Fire hydrants, boxes and covers	2,215 00	
Laying water pipe	1,905 92	
Service pipe	1,204 05	
Special castings	907 09	
Taps and stops	820 80	
Laying service pipe	642 01	
Labor on and carting pipe	368 48	
Tools	306 99	
Barn expenses	265 11	
Babcock and Wilcox boilers at Hope station—to erect	241 56	
Wharf salaries	195 00	
Horses, wagons, harnesses, etc	65 72	
Sundries	88	
	$34,048 22	

For maintenance, ... $15,353 99

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,525 71	
Sundries	642 42	
Engineers	632 33	
Firemen	604 60	
Superintendence	299 00	
Lights	125 09	
Oil, waste and packing	84 95	
Labor on fuel	60 45	
Corliss pumping engine and house	54 60	
Barn expenses	49 95	
Cornish engine house	39 41	
Worthington pumping engine	27 43	
Care of grounds	15 30	
Worthington high-duty pumping engine	14 60	
Real estate	13 50	
		$5,189 34

SOCKANOSSET RESERVOIR.

Watchman	$182 00	
Sundries	70 58	
		252 58
Amount carried forward		$5,441 92

Digitized by Google

Amount brought forward		$5,441 92

Hope Pumping Station.

Engineers	$575 25	
Firemen	418 60	
Hope pumping engine, No. 2	181 29	
Lights	125 35	
Sundries	57 10	
Oil, waste and packing	27 68	
		1,385 27

Hope Reservoir.

Watchman		204 75

Fruit Hill Reservoir.

Watchman	$204 75	
Sundries	139 15	
		343 90

Pipe Line and Service Stops.

Repairs	$2,090 98	
Superintendence—salaries	888 35	
		2,979 33

Meter Department.

Water meters	$1,491 82	
Setting and repairing meters	1,370 69	
		2,862 51

Miscellaneous.

Clerks' and Inspectors' salaries	$1,239 16	
Prevention of defilement of the Pawtuxet	416 67	
Barn expenses	221 05	
Horses, wagons, harnesses, etc	109 34	
Analyses of water	90 00	
Pipe yard, office expenses	52 00	
Telephone lines	4 00	
Sundries	2 46	
Public drinking fountains and troughs	1 63	
		2,136 31
		$15,353 99

The amount of expenditures from January 1 to March 31, 1896, inclusive, was . . $49,402 21

The total expenditures to March 31, 1896, inclusive, was $8,235,699 09

Digitized by Google

The *net* expenditure for construction and extension from January 1 to March 31, 1896, inclusive, was	$33,218 76
The *net* expenditure for construction and extension to March 31, 1896, inclusive, was	$6,152,304 15
The *net* expenditure for maintenance from January 1 to March 31, 1896, inclusive, was	$10,328 54
The *net* expenditure for maintenance to March 31, 1896, inclusive, was	$1,310,375 95

Bills deposited with the City Treasurer for collection, from January 1 to March 31, 1896, inclusive, amounted to $332,087 30

As follows:

Water	$326,187 17
Water meters	3,193 00
Setting and repairing meters	1,463 05
Penalties	220 00
Rent of real estate	150 50
Permanently closing service stops	60 00
Old harness	5 00
Labor and material, laying service pipes, etc	778 06
Lead dross	30 52
	$332,087 30

During the quarter coupons from bills collected have been returned by the City Treasurer and receipted for, amounting to . . $325,016 34

As follows:

Water	$318,941 43
Water meters	3,282 50
Setting and repairing meters	1,531 95
Penalties	220 00
Rent of real estate	150 50
Permanently closing service stops	55 00
Old harness	5 00
Sealing fire hydrant	50
Labor and material, laying service pipes, etc	798 94
Lead dross	30 52
	$325,016 34

Digitized by Google

SEWERS.

During the quarter ending March 31, 1896, one hundred and five permits were issued to drain layers—sixty-one for new work and forty-four for extension and repairs of drains.

Thirty-seven drain layers' licenses were issued during the quarter, all of which expire December 31, 1896.

January 6th, the offer of J. W. Bishop & Co. to erect screen gates at the Ernest street Sewage Pumping Station, was accepted. Amount $1,603.00.

January 21st, the offer of C. W. Hunt Company, of New York, to furnish a charging car, track scales, tracks and appurtenances for the boiler house of the Ernest street Sewage Pumping Station, was accepted. Amount $803.00.

January 23d, the proposal of Beaton Brothers to furnish granite catch-basin inlet stones was accepted and a contract subsequently executed. Amount $718.75.

January 28th, the proposal of Maryland Steel Company to furnish and erect in the Ernest street Sewage Pumping Station a ten-ton travelling crane, was accepted. Amount $1,699.00.

February 26th, the proposal of the New England Steam Brick Company to furnish and deliver from 500,000 to 3,000,000 sewer brick for the improved sewerage system, was accepted and a contract subsequently executed.

February 28th, the offer of Harrison Hallett for painting the iron work of the roofs of the Ernest street Sewage Pumping Station, was accepted.

February 29th, the proposal of Manchester & Hudson to furnish and deliver 300,000 Fisher Island sewer brick, was accepted and a contract subsequently executed.

Digitized by Google

March 4th, the proposal of Charles M. Kelly to furnish and deliver 300,000 Allison & Wood sewer brick, was accepted and a contract subsequently executed.

During the quarter assessments for the cost of constructing sewers were certified to the City Treasurer, as follows:

Adelaide avenue	$ 1,238 10
Cedar street	497 65
Whitney street	1,661 23
McKinley street	1,887 10
Shawmut street	1,232 51
Roger Williams Park, Miller avenue and Broad street	12,111 11
Andem street	1,245 34
Peirce street	442 11
Chester avenue	419 58
Wellington street	370 81
Acorn street and Harris avenue	2,992 26
Lillian avenue	2,124 94
Norwich avenue	1,875 41
Rhode Island and Grand avenues	4,107 57
Goddard street	3,648 49
Van Zandt street	1,212 93
Sycamore street	466 18
Gay street	474 91
Hewes street	401 32
Broadway	325 24
Gaspee and Cove streets	2,953 15
Autumn street	925 05
Public street	2,132 53
Rhodes street and Allen's avenue	3,927 68
Stanwood street	2,306 65
Althea street	3,014 98
Harris avenue	9,184 82
Total	$63,179 65

March 5th a contract for the construction of the following section of the improved sewerage system was awarded and subsequently executed as follows:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

TO THOMAS W. REILLY.

No. of resolution.	Date of approval.		
505.	Nov. 8, 1895,	*Elmgrove, Irving and Wayland avenues, Seekonk River Division,* .	$21,306 00

Digitized by Google

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
564.	Sept.	23,	1893,	*Section 10, Allen's avenue Division*, .	Jan. 8, 1896.
521.	"	25,	1894,	*Section 18, Moshassuck River Division*, ...	Jan. 4, 1896.
530.	Dec.	3,	1895,	*Rhode Island and Grand avenues*,	Jan. 1, 1896.
545.	"	17,	"	*Francis street, northerly from West Exchange street*, ...	Feb. 4, 1896.

At the close of the quarter, work upon the following sewer of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
505.	Nov.	8,	1895,	*Elmgrove, Irving and Wayland avenues.*

Work upon the following sewers, completing the work ordered by the City Council, had not commenced March 31, 1896, namely:

No. of resolution.	Date of approval.			
571.	Dec.	20,	1895,	*Dexter street, from Miller to Cranston.*
572.	"	"	"	*Moshassuck River and West River Divisions, Improved Sewerage System.*

The amount of bills approved on account of sewers from January 1 to March 31, 1896, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation.....	$ 5,239 94	
Improved sewerage appropriation.....	29,765 63	
		$35,005 57

Digitized by Google

Charged as follows:

Material	$ 4,220 27
Salaries of assistant engineers	3,180 75
Contract reservations	2,042 00
Sundries, improved sewerage system	972 02
Sundries	356 88
Testing cement	75 20
Additional catch-basins	20 46
Sewer in Francis street, northerly from West Exchange	3,016 76
Sewer in Rhode Island and Grand avenues	15 35
Sewer in Allen's avenue Division, Section 10	4,547 37
Sewer in Allen's avenue Division, Section 11	668 79
Sewer in Elmgrove, Irving and Wayland avenues	686 75
Sewer in Moshassuck river Division, Section 17	1 25
Sewer in Moshassuck river Division, Section 18	934 38
Brick buildings and chimney for sewage pumping station	7,361 15
Foundation for sewage pumping station	6,673 26
Holly sewage pumping engines	1 00
Steel roof for sewage pumping station	231 93
	$35,005 57

For maintenance, ... $8,563 46

Charged as follows:

Repairing basins and sewers	$3,548 81
Cleaning basins and sewers	2,131 03
Cleaning and repairing old drains	731 00
Inspection of connections	610 24
Tools	520 49
Salary—superintendent	390 00
Barn expenses	359 57
Horses, wagons, harnesses, etc	109 47
Office expenses	69 74
Filling cisterns, etc	52 36
Cleaning private connections	35 80
Sundries	4 95
	$8,563 46

The *net* expenditure for construction of sewers to March 31, 1896, inclusive, was $5,622,108 00

The *net* expenditure for maintenance of sewers to March 31, 1896, inclusive, was $478,057 75

Bills deposited with the City Treasurer for collection from January 1 to March 31, 1896, inclusive, amounted to $635 91

Digitized by Google

As follows:

Cleaning private connections	$ 84 75
Filling cisterns, etc	34 10
Sewer material	491 02
Laying drains to curbstones	26 04
	$635 91

During the quarter coupons from bills collected have been returned by the City Treasurer and receipted for, amounting to . . $748 41

As follows:

Cleaning private connections	$ 78 25
Filling cisterns, etc	41 60
Sewer material	602 52
Laying drains to curbstones	26 04
	$748 41

HIGHWAYS.

One permit to open street was issued during the quarter.

January 21st, the offer of Crabtree & Havey of West Sullivan, Maine, to furnish and deliver ten thousand lineal feet straight granite curbing was accepted. Amount $5,700.00.

January 23d, the offer of Booth Bros. and Hurricane Isle Granite Company to furnish circular curbing, curb corners and granite crosswalk stones, was accepted. Amount $1,637.50.

Statements have been prepared of the cost of curbstones set, ascertained by the Commissioner and certified to the Board of Aldermen for approval, as follows:

Rhodes street, from Eddy to Allen's avenue	$1,234 02
Maryland avenue, from New York to the city line	2,573 33
Railroad street, from Gaspee to Francis	623 06
Kossuth street, from Bowdoin to Putnam	295 96
Alma street, from Candace to Pekin	587 68
Wendell street, from Messer to Ellery	1,038 72
Althea street, from Dexter to Cranston	2,382 11
Evergreen street, from Camp to North Main	1,629 93
Amount carried forward	$00,000 00

Digitized by Google

Amount brought forward	$00,000 00
Forest street, from Camp to Ivy	888 81
Plum street, from Oxford to Fruit	486 15
Stillman street, from Gaspee to Promenade	667 22
Taylor street, from Glenham to Chester avenue	502 10
Tingley street, from Acorn to Ashley avenue	484 75
Atlantic avenue, from Elmwood avenue to Melrose street	1,187 04
Burrington street, from Crocker avenue to Pacific	1,111 76
Ellery street, from Wendell to Chapin avenue	320 20
Fruit street, from Broad to Gordon avenue	838 85
Hudson street, from Ellery to Huntington avenue	690 39
Orchard street, from Oxford to Fruit	469 96
Reynolds avenue, from Broad street to Taylor	862 35
Charles street, from Ledge to Hagan	2,130 03
Shawmut street, from Orms to Chalkstone avenue	810 38
Silver Spring street, from Branch avenue to Charles street	2,155 54
Willow street, from Messer to Ellery	536 60
South street, from Eddy to the river	547 75
Abbott street, from Knowles to Camp	854 79
Sims avenue, from Harris to Kinsley	1,021 92
Cove street, (now West Exchange) from Sabin to West Exchange	1,414 99
Harris avenue, from Acorn street to Eagle	2,808 27
Eden street, from Broadway to Bell street	1,156 96
Oakland street, from Elmwood avenue to Public street	210 45
West River street, from Branch avenue to bridge north of McKenna street	1,019 24
Aborn street (west side) from Cedar to West Exchange	173 21
Hewes street, from Stevens to North Main	326 35
Gordon avenue, from Public street to Oxford	2,103 60
Governor street from Power to Williams	467 35
Miller avenue, from Broad street to its westerly termination	3,040 43
Potter street, from Pine to Friendship	293 06
Summer street, from opposite Meadow to Conduit	115 69
Total	$40,061 01

During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, viz.:

Point street, from Friendship to Plain	$116 37
Cushing street, from Prospect to Hope	188 02
Beacon avenue, from Friendship street to Lockwood	58 70
Providence street, from Prairie avenue to Dudley street	36 56
Carrington avenue, from Camp street to East avenue	40 59
Walker street, from Westminster to Washington	16 35
Williams street from Benefit to South Main	32 33
Linden street, from Broad to Providence	65 40
Amount carried forward	$00,000 00

Digitized by Google

Amount brought forward	$00,000 00
Olney street, from North Main to East avenue	829 79
Stewart street, from Broad to Westminster	52 03
Summer street, from Point to Broad	99 30
Bacon street, from North Main to Camp	120 94
Burrill street, from Westminster to Weybosset	29 36
Washington avenue from Broad street to Maryland avenue	98 87
Carpenter street, from Marshall to Courtland	18 61
Broad street, from Trinity square to the city line	1,047 63
Lockwood street, from Broad to Prairie avenue	104 98
Walnut street, from Westminster to Washington	30 51
Cranston street, from Messer to the city line	28 71
Almy street, at the northeast corner of Grove	47 22
Total	3,062 27

The following work was in progress March 31, 1896, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.

May 16, 1895, *Harris avenue, from Kinsley to Acorn street, and from Acorn to Eagle:*—one-half completed.

To Bring to Sub-Grade and Put in Good Condition.

No. of resolution.	Date of approval.	
518.	Sept. 25, 1894,	*Washington avenue, from Broad street to Maryland avenue.*
518.	" " "	*Massachusetts avenue, from Broad street to Maryland avenue.*
518.	" " "	*Virginia avenue, from New York avenue to Montgomery.*

To Build.

331. June 27, 1895, *Pitman street, from Wayland avenue to East River street:*—nearly completed.

Digitized by Google

To be Paved with Granite Blocks.

151.	April	5,	1895,	*Kinsley avenue, from Gaspee street to Harris avenue:*—nearly completed.
151.	"	"	"	*Harris avenue, from Kinsley to Eagle street:*—one-half completed.
151.	"	"	"	*Peck street, from Weybosset to Dyer:*—one-half completed.
151.	"	"	"	*Hay street, from Weybosset to Friendship:*—one-half completed.

To Concrete Sidewalks.

417.	Sept.	19,	1895,	*Cranston street, from Messer to the city line.*
417.	"	"	"	*Washington avenue, from Broad street to Maryland avenue.*

The following work, ordered by the Board of Aldermen and City Council, had not commenced March 31, 1896, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
May 16, 1895,	*Francis street, from Cove street and Exchange place to Gaspee street.*
" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
June 20, 1895,	*Autumn street, from Eddy to Rugby.*
" " "	*Frank street, from Plain to Beacon avenue.*
" " "	*Gordon avenue, from Oxford street to Gallup.*

Digitized by Google

Date of order.	
Sept. 19, 1895,	*Huntington avenue, from Cranston street to Union avenue.*
" " "	*River avenue, from Chalkstone to the brook on River avenue.*
" " "	*Forest street, from Ivy to East avenue.*
" " "	*Greeley street, from Charles to Opper.*
" " "	*Linwood avenue, from Cranston street to Union avenue.*
" " "	*Lisbon street, from Chalkstone avenue to Regent.*
" " "	*Marlborough street from East Beacon to Pearl.*
" " "	*Wood street, from Ellery to Huntington avenue.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Gaspee street, from Cove to the railroad bridge abutment.*
151.	" " "	*Gaspee street, from Kinsley avenue to first angle east of Francis street.*
151.	" " "	*Francis street, from Cove and Exchange place to Gaspee street.*
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
151.	" " "	*The two approaches to the proposed depot in Exchange place.*
151.	" " "	*Washington street, from Eddy to Walker.*

To be Paved with Granite Blocks and Cobble Stones.

543.	Dec. 17, 1895,	*Eddy street, from Henderson to Public.*

Digitized by Google

To Re-build.

No. of resolution.	Date of approval.	
282.	June 15, 1895,	*Benefit street, from Wickenden to North Main.*

To Purchase, Erect and Maintain.

271.	June 7, 1895,	*Six public urinals in central part of the city.*

To Concrete Sidewalks.

417.	Sept. 19, 1895,	*Angell street, from Prospect to Benefit.*
417.	" " "	*Transit street, from Brook to Hope.*
417.	" " "	*Livingstone street, from West River to North Main.*
417.	" " "	*South Main street, from Power to Transit.*
417.	" " "	*Oriole avenue, from Butler to Grand.*
417.	" " "	*Taber avenue, from Angell street to Irving avenue.*
417.	" " "	*East Manning street, from Governor to Wayland avenue.*
417.	" " "	*Pine street, from Beacon avenue to Hay street.*

Bills approved on account of highways from January 1 to March 31, 1896, inclusive amounted to:

Regular appropriation	$31,367 85	
Special appropriation	10,354 59	
		$41,722 44

Classified as follows:

Crushed stone—material and labor	$8,378 63
Screening gravel	6,423 34
Cleaning streets	2,980 28
Removing snow and ice	2,752 61
Amount carried forward	$20,534 86

Digitized by Google

Amount brought forward	$20,534 86	
Barn expenses	2,445 08	
Steam rollers—repairs and supplies	1,934 36	
Blacksmith and wheelwright shop	1,819 21	
Labor on material	1,309 12	
Tools, implements, etc	778 70	
Repairs on unpaved streets	708 81	
Repairs on stone crushers	476 20	
Salaries—superintendent and clerks	442 00	
Horses, wagons, harnesses, etc	161 13	
Watchman at city yard	156 00	
Repairs on paved streets	74 09	
Office expenses, city yard	73 24	
New brick workshop—to build	55 13	
Sundries	52 90	
Fencing streets—material and labor	25 00	
		$31,045 83

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Reynolds avenue, from Broad street to Taylor	$322 02	
West River street, from Branch avenue to bridge north of McKenna street	18 04	
		340 06

Pave with Granite Blocks.

Dyer street, from Ship to end of pavement near Friendship	$43 75	
Friendship street, from Chestnut to Dyer	26 19	
Harris avenue, from Kinsley to Eagle street	720 42	
Orange street, from Weybosset to Dyer	2,131 75	
Pine street, from Beacon avenue to Hay street	5,104 78	
Traverse street, from Wickenden to Pike	7 49	
Washington street, from Eddy to Walker	218 36	
		8,252 74

Build.

East avenue, from Olney street to Rochambeau avenue	$169 74	
East River street, including Waterman, to the new bridge	1,914 07	
		2,083 81
		$41,722 44

Bills deposited with the City Treasurer for collection from January 1 to March 31, 1896, inclusive, amounted to $442 55

Digitized by Google

As follows:

Labor and material	$236 68
Manure from barn	74 00
Street sweepings	60 00
Blacksmithing done for other departments	47 49
Discharging cargoes at city wharf	24 38
	$442 55

During the quarter coupons from bills collected have been returned by the City Treasurer and receipted for, amounting to . . $6,730 63

As follows:

Union Railroad Co. for granite blocks, etc.	$3,534 87
New York, New Haven and Hartford Railroad Co. for granite blocks, etc.	2,748 00
Labor and material	289 38
Manure from barn	74 00
Street sweepings	60 00
Discharging cargoes at city wharf	24 38
	$6,730 63

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from January 1 to March 31, 1896, inclusive, amounted to . . . $305 70

Charged as follows:

Concreting sidewalks	$305 70

Curbing bills deposited with the City Treasurer for collection from January 1 to March 31, 1896, inclusive, amounted to . $40,549 12

During the quarter coupons from curbing bills collected have been returned by the City Treasurer and receipted for, amounting to . $11,194 25

Digitized by Google

CITY ENGINEER.

Bills approved on account of the City Engineer's department from January 1 to March 31, 1896, inclusive, amounted to . . . $11,683 47

Charged as follows:

Salary—City Engineer	$1,500 00
Salaries of assistants	8,953 33
Salaries of clerks	763 75
Supplies—drawing materials, etc	424 11
Sundries	21 78
Instruments and repairs	16 15
Car fares, etc	4 35
	$11,683 47

Bills deposited with the City Treasurer for collection from January 1 to March 31, 1896, inclusive, amounted to $4 20

As follows:

Blue process paper	$2 69
Plumb bob	1 00
Ink	39
Tracing cloth	12
	$4 20

During the quarter coupons from bills collected have been returned by the City Treasurer and receipted for, amounting to . . $4 20

As follows:

Blue process paper	$2 69
Plumb bob	1 00
Ink	39
Tracing cloth	12
	$4 20

Digitized by Google

BRIDGES.

February 12th, the offer of Frank F. Carpenter to furnish and deliver 37,000 feet, B. M., white spruce plank, was accepted.

March 11th, the offer of E. R. Crowell & Co. for painting the new Central or Red Bridge, was accepted. Amount $507.00.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894.	*New City Yard, Henderson street*: —to grade and fence.
511.	Sept. 25, "	*Red Bridge, over the Seekonk river*:—nearly completed.
89.	Feb. 26, 1895,	*Washington row bridge*:—nearly completed.
252.	June 7, "	*Promenade street bridge, over the Moshassuck river*:—pier completed.
346.	July 10, "	*Exchange bridge, over the Providence river*:—abutments and piers in progress.

Bills approved on account of bridges from January 1 to March 31, 1896, inclusive, amounted to $23,460 93

Charged as follows:

Barn expenses	$88 20
Building at city yard	11 35
Burnside bridge	47 96
Central or Red Bridge	225 76
Crawford street bridge	2 20
Exchange bridge—to rebuild	6,658 23
Horses, wagons, harnesses, etc	25 96
Lumber, hardware, etc	9 05
Point street bridge	752 50
Promenade street bridge over Moshassuck river—to build.	435 72
Rent of keeper's house, Washington bridge	30 00
Amount carried forward	$8,286 93

Digitized by Google

Amount brought forward	$8,286 93
Salaries—Central or Red Bridge	468 50
Salaries—Point street bridge	977 50
Salaries—Washington bridge	481 00
Sundries	179 28
Tools	252 09
Valley street culvert	569 14
Washington bridge	253 14
Washington row bridge—to rebuild	11,992 35
Whelden street bridge	1 00
	$23,460 93

Bills approved from January 1 to March 31, 1896, inclusive, for the construction of the new Red Bridge, have been paid from the special appropriation for that work to the amount of $12,855 65

Bills deposited with the City Treasurer for collection from January 1 to March 31, 1896, inclusive, amounted to $526 67

As follows:

Hardware and lumber furnished various departments	$524 42
Old lumber from Gaspee street foot bridge	2 25
	$526 67

During the quarter coupons, from bills collected, have been returned by the City Treasurer and receipted for, amounting to . $526 67

As follows:

Hardware and lumber furnished various departments	$524 42
Old lumber from Gaspee street foot bridge	2 25
	$526 67

Digitized by Google

PUBLIC WORKS OFFICE.

Bills approved from January 1 to March 31, 1896, inclusive, for account of the Public Works office, amounted to . . . $4,985 44

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,863 89
Office supplies	196 55
	$4,985 44

ROBERT E. SMITH,

Commissioner.

Digitized by Google

Digitized by Google

FIFTY-FOURTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1896.

THE NEWBERRY LIBRARY
72358

REMINGTON PRINTING CO., CITY PRINTERS,
63 Washington Street.
1896.

Digitized by Google

Digitized by Google

FIFTY-FOURTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING, JUNE 30, 1896.

REMINGTON PRINTING CO., CITY PRINTERS,
63 Washington Street.
1896.

Digitized by Google

THE NEW YORK PUBLIC LIBRARY
P 72358
ASTOR, LENOX AND TILDEN FOUNDATIONS.
1900.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., July 1, 1896.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-fourth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending June 30, 1896:

WATER WORKS.

The proposal of John R. White & Son to furnish and deliver at Hope Pumping Station three hundred and fifty tons egg coal, was accepted.

June 2nd, the following contracts were awarded under authority of Joint Resolution of the City Council No. 234, approved May 26, 1896, directing the Commissioner of Public Works to construct a separate system of water mains and hydrants for fire protection, namely:

Warren Foundry and Machine Company, for about 2,465 tons of cast iron water pipes. Total, $50,536.60.

Fuller Iron Works, for special castings at two cents per pound.

June 25th, the proposal of the Coffin Valve Company to furnish and deliver in this city ninety flush hydrants, with gates and boxes complete, for the separate system for fire protection, was accepted. Amount, $11,700.00.

Digitized by Google

The average daily consumption of water during the last quarter was 9,170,835 gallons.

Water pipes were laid during the quarter as follows:

16-INCH.

In line with Brayton avenue, extended south	54.06 feet.

12-INCH.

In Mathewson street, Chalkstone and Kinsley avenues	776.56 feet.

10-INCH.

In Gaspee street	59.18 feet.

8-INCH.

In Chapman, Cross, Francis and Promenade streets, Adelaide, Kinsley and President avenues; in Dyer avenue, town of Johnston	3,586.39 feet.

6-INCH.

In Roger Williams Park; Althea, Auburn, Aurora, Beach, Broom, Crescent, Cushing, David, Dexter, Dorrance, Goddard, Globe, Hassan, Lawton, Leland, Mason, Marion, McKinley, Melrose, Promenade, Rill, Robin, Rugby, Stillman, Somerset, Spooner, Suffolk, Wilcox, Winthrop and Woodland streets; Huntington, Mechanics, Pavilion, Slater and Yale avenues; in Kelley avenue, town of Johnston; in Clarence, Commercial, Garden, Grace, Northup and Smith streets, Arlington, Germania, Northup and Washington avenues, town of Cranston	12,916.17 feet.
Total	17,392.36 feet.

or 3.294 + miles.

Water pipes were removed or abandoned during the quarter as follows:

10-INCH.

Gaspee street	243.87 feet.

8-INCH.

Promenade street	21.92 feet.

6-INCH.

West Exchange street	525.58 feet.
Total	791.37 feet.

or .149 + miles.

Digitized by Google

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,579.03 feet.
12-inch	86,142.55 feet.
10-inch	14,468.44 feet.
8-inch	250,143.81 feet.
6-inch	1,071,768.83 feet.
Total	1,579,259.32 feet.

or 299.102+miles.

Twenty-nine fire hydrants were set during the quarter, one in each of the following locations:

Adelaide avenue, north side, at the easterly corner of Holbrook street.
Adelaide avenue, north side, at the easterly corner of Crescent street.
Althea street, northeasterly corner of Sorrento street.
Brown University grounds, 103 feet south of Waterman street.
Brown University grounds, 281.5 feet south of Waterman street.
Brown University grounds, 122.5 feet north of George street.
Brown University grounds, 128.5 feet north of north curb line of George street.
Brown University grounds, 332.5 feet north of north curb line of George street.
Chalkstone avenue, north side, about 150 feet west of Samoset avenue.
Cranston street, Cranston, opposite north line of North street.
Cranston street, Cranston, opposite Washington avenue.
Cross street, northwest corner of Wilcox street.
Cushing street, northwest corner of Brown street.
Cushing street, north side, about 120 feet east of Prospect street.
Francis street, east side, about 230 feet south of Gaspee street.
Globe street, north side, about 200 feet west of Plain street.
Goddard street, north side, about 400 feet west of Douglas avenue.
Huntington avenue, east side, about 800 feet south of Lorea street.
Kinsley avenue, south side, about 230 feet west of east line of cold storage building.
Kinsley avenue, south side, about 1,070 feet west of east line of cold storage building.
Lawton street, north side, about 270 feet east of Crescent street.
Leland street, east side, about 160 feet north of Promenade street.
McKinley street, north side, about 95 feet east of Alger avenue.
Mechanics avenue, east side, about 220 feet north of Livingstone street.
President avenue, northeast corner of Slater avenue.
Promenade street, north side, about 320 feet west of Steeple street.
Robin street, northeast corner of Regent avenue.
Suffolk street, northeast corner of Salina street.
Washington avenue, Cranston, northeast corner of Depot avenue.

Digitized by Google

One fire hydrant was removed from old Gaspee street, 167 feet south of Promenade street.

The total number of fire hydrants is now seventeen hundred and twenty-eight—sixteen hundred and sixty-two flush and sixty-six post hydrants.

During the quarter two hundred and thirty-six water meters were set, of which number five were to replace other meters. The use of eight meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,159	625	148	33	6				3,971
Ball & Fitts, rotary			21	18	1	3	2		45
Crown	6,820	694	180	84	24	12	13		7,827
Fales, Jenks & Sons			1						1
Thomson	2,021	326	74	54	22	7	7	4	2,515
Trident	28								28
Worthington	2	1			1		1		5
	12,030	1,646	424	189	54	22	23	4	14,392

Ten plumbers' licenses have been issued during the quarter, making the total number one hundred and two, all of which expire December 31, 1896.

Nine hundred and ninety-four permits to do plumbing work were issued during the quarter.

Three hundred and thirty-two applications for water were made during the quarter, making the total number June 30, 1896, twenty-one thousand three hundred and seventy-seven.

Digitized by Google

The number of new service stops opened during the quarter was two hundred and seventy-four.

The total number of service stops opened to June 30, 1896, inclusive, was twenty thousand six hundred and thirty-seven. The number in actual use, June 30, 1896, was nineteen thousand one hundred and forty-four.

The amount of bills approved on account of water works from April 1, to June 30, 1896, inclusive, was:

For construction and extension, ... $23,366 47

Classified as follows:

Cast iron water pipe	$ 8,873 16
Holly high-duty compound engine at Hope station—to erect	5,035 00
Laying water pipes	3,738 91
Special castings	1,761 76
Laying service pipe	1,358 15
Taps and stops	753 90
Horses, wagons, harnesses, etc	605 00
Labor on and carting pipe	375 64
Barn expenses	260 76
Tools	256 45
Wharf salaries	195 00
Service pipe	75 01
Babcock and Wilcox boilers at Hope station—to erect	74 33
Special water service for fire protection	3 40
	$23,366 47

For maintenance, ... $21,904 44

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,608 68
Lights	910 07
Sundries	584 09
Firemen	583 60
Engineers	525 33
Superintendence	299 00
Amount carried forward	$5,510 77

Digitized by Google

Amount brought forward	$5,510 77	
Corliss pumping engine and house	255 14	
Worthington high-duty pumping engine	142 85	
Care of grounds	133 55	
Oil, waste and packing	49 97	
Barn expenses	35 67	
Labor on fuel	18 75	
Cornish engine house	6 25	
Real estate	2 70	
		$6,155 65

SOCKANOSSET RESERVOIR.

Sundries	$389 82	
Watchman	182 00	
		571 82

HOPE PUMPING STATION.

Coal and wood	$1,610 00	
Engineers	575 25	
Firemen	418 60	
Sundries	165 33	
Care of grounds	128 50	
Lights	98 90	
Oil, waste and packing	3 95	
Hope pumping engine, No. 2	70	
		3,001 23

HOPE RESERVOIR.

Sundries	$707 80	
Watchman	204 75	
		912 55

FRUIT HILL RESERVOIR.

Sundries	$505 42	
Watchman	204 75	
		710 17

PIPE LINE AND SERVICE STOPS.

Repairs	$2,172 64	
Superintendence—salaries	890 00	
		3,062 64

METER DEPARTMENT.

Water meters	$3,708 92	
Setting and repairing meters	1,307 24	
		5,016 16
Amount carried forward		$19,430 22

Digitized by Google

Amount brought forward		$19,430 22

MISCELLANEOUS.

Clerks' and inspectors' salaries	$1,239 16	
Prevention of defilement of the Pawtuxet	436 55	
Horses, wagons, harnesses, etc	348 71	
Barn expenses	223 90	
Analyses of water	90 00	
Sundries	55 71	
Pipe yard, office expenses	26 10	
Public drinking fountains and troughs	23 89	
Real estate at Pawtuxet	17 50	
Telephone lines	12 70	
		2,474 22
		$21,904 44

The amount of expenditures from April 1 to June 30, 1896, inclusive, was $45,270 91

The total expenditures to June 30, 1896, inclusive, was $8,280,970 00

The *net* expenditure for construction and extension from April 1 to June 30, 1896, inclusive, was	$21,709 60
The *net* expenditure for construction and extension to June 30, 1896, inclusive, was	$6,174,013 75
The *net* expenditure for maintenance from April 1 to June 30, 1896, inclusive, was	$14,983 02
The *net* expenditure for maintenance to June 30, 1896, inclusive, was	$1,325,358 97

Bills deposited with the City Treasurer for collection from April 1 to June 30, 1896, inclusive, amounted to $63,971 81

As follows:

Water	$55,445 67
Water meters	4,651 50
Setting and repairing meters	1,927 92
Rent of real estate	168 00
Penalties	66 00
Examination and repairs of pipe line	35 90
Permanently closing service stops	15 00
Second-hand harness	5 00
Old oil barrel	50
Labor and material, laying service pipes, etc	1,252 67
Fire hydrants	400 00
Old iron	3 65
	$63,971 81

Digitized by Google

During the quarter coupons from bills collected have been returned by the City Treasurer and receipted for, amounting to . . . $65,936 06

As follows:

Water	$57,291 77
Water meters	4,627 50
Setting and repairing meters	2,080 42
Rent of real estate	168 00
Penalties	66 00
Permanently closing service stops	20 00
Examination and repairs of pipe line	20 00
Second-hand harness	5 00
Old oil barrel	50
Labor and material, laying service pipes, etc	1,253 22
Fire hydrants	400 00
Old iron	3 65
	$65,936 06

SEWERS.

During the quarter ending June 30, 1896, three hundred and seventy-six permits were issued to drain layers—two hundred and sixty-five for new work and one hundred and eleven for extension and repairs of drains.

Seven drain layers' licenses were issued during the quarter, making the total number forty-four, all of which expire December 31, 1896.

April 7th, the offer of the Narragansett Improvement Company to cover the roof of the coal vaults at Ernest Street Pumping Station with Trinidad Lake asphalt pavement was accepted.

May 20th, the proposal of Corliss Steam Engine Company to furnish the filth hoist, and erect in place, at the Ernest Street Pumping Station, was accepted. Amount, $2,240.00.

Digitized by Google

May 20th, the proposal of J. A. Dailey & Son to build a bridge at the Ernest Street Pumping Station, in accordance with plans and specifications, was accepted. Amount, $685.00.

April 22d, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To George R. Newman & Co.

No. of resolution.	Date of approval.				
571.	Dec.	20,	1895,	*Dexter street, from Miller to Cranston,*	$1,920 25
148.	April	9,	1896,	*In line of Blackstone street, easterly from Allen's avenue,* . .	7,885 50

To Frederick E. Shaw.

149.	April	9,	1896,	*Camp street, from Doyle avenue to Howell street,* . .	$3.41
151.	"	"	"	*Hope street, from East avenue to Thayer street,* . .	10 04

To Timothy F. Lyons.

150.	April	9,	1896,	*Grand avenue, from Angell street to Oriole avenue,* . .	$297 67
153.	"	"	"	*Wheaton and South Court streets,* . .	468 87

Digitized by Google

TO WATSON & SHERMAN.

No. of resolution.	Date of approval.		
152.	April 9, 1896,	*Melrose, Broad, Early and Colfax streets,*	$1,623 30

June 25th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

TO EDWARD W. EVERSON.

No. of resolution.	Date of approval.		
230.	May 26, 1896,	*Harris avenue, from Grove street to north of Atwell's avenue,* .	$5,918 30

TO WATSON & SHERMAN.

249.	May 29, 1896,	*President avenue and Blackstone boulevard,*	$1,804 63
252.	" " "	*Liberty street, from Smith street, northerly,*	216 10
287.	June 24, 1896,	*Francis, Lincoln and Gaspee streets,* . .	2,139 01

TO FREDERICK E. SHAW.

250.	May 29, 1896,	*Globe street, from Beacon avenue to Plain street,* . . .	$297 20
251.	" " "	*Harriet and Sayles streets,*	710 30

Digitized by Google

TO GEORGE R. NEWMAN & CO.

No. of resolution.	Date of approval.				
406.	July	15,	1889,	*Section 4, Disposal Division, Improved Sewerage System, Condensing water Intake,*	$13,654 50

June 30th, a contract for dredging was awarded and subsequently executed, namely:

TO J. A. DAILEY & SON.

No. of resolution.	Date of approval.				
406.	July	15,	1889,	*Section 4, Disposal Division, Improved Sewerage System, Condensing water Intake,*	$2,640 00

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
571.	Dec.	20,	1895,	*Dexter street, from Miller to Cranston,*	May 14, 1896.
149.	April	9,	1896,	*Camp street, from Doyle avenue to Howell street,* . .	June 1, 1896.
150.	"	"	"	*Grand avenue, from Angell street to Oriole avenue,* .	May 13, 1896.
152.	"	"	"	*Melrose, Broad, Early and Colfax streets,*	May 20, 1896.
153.	"	"	"	*Wheaton and South Court streets,* . .	June 30, 1896.

Digitized by Google

At the close of the quarter, work upon the following sewer of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
505.	Nov. 8, 1895,	*Elmgrove, Irving and Wayland avenues.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.	
148.	April 9, 1896,	*In line of Blackstone street, from Allen's avenue, easterly.*
151.	" " "	*Hope street, from East avenue to Thayer street.*
287.	June 24, "	*Francis, Lincoln and Gaspee streets.*

Work upon the following sewers, completing the work ordered bv the City Council, had not commenced June 30, 1896, namely:

No. of resolution.	Date of approval.	
406.	July 15, 1889,	*Section 4, Disposal Division, Improved Sewerage system—Condensing Water Intake.*
406.	" " "	*Section 4, Disposal Division, Improved Sewerage system—Dredging for Condensing Water Intake.*
572.	Dec. 20, 1895,	*Moshassuck River and West River Divisions, Improved Sewerage System.*
159.	April 17, 1896,	*Davis Park and Pleasant Valley Division, Improved Sewerage System.*

Digitized by Google

230.	May	26,	"	*Harris avenue, from Grove street to north of Atwell's avenue.*
249.	"	29,	"	*President avenue and Blackstone boulevard.*
250.	"	"	"	*Globe street, from Beacon avenue to Plain street.*
251.	"	"	"	*Harriet and Sayles street.*
252.	"	"	"	*Liberty street, from Smith street, northerly.*
302.	June	27,	1896,	*Broad and Colfax streets.*
303.	"	"	"	*Burrington street and Jackson avenue.*
304.	"	"	"	*Felix street, from Chalkstone avenue to Valley street.*
305.	"	"	"	*Jewett street, from Park to Holden.*
306.	"	"	"	*Thayer street, from Arnold to Transit.*

The amount of bills approved on account of sewers from April 1 to June 30, 1896, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$26,095 42	
Improved sewerage appropriation	57,696 80	
		$83,792 22

Charged as follows:

Material	$15,281 46
Contract reservations	11,177 64
Salaries of assistant engineers	3,028 50
Sundries	222 22
Testing cement	142 80
Additional catch-basins	102 91
Tools	23 30
Laying drains to curbstone	12 09
Sundries, improved sewerage system	4 11
Sewer in line of Blackstone street, from Allen's avenue easterly	7,099 49
Sewer in Camp street, from Doyle avenue to Howell street	1,059 03
Amount carried forward	$38,153 55

Digitized by Google

Amount brought forward	$38,153 55
Sewer in Dexter street, from Miller to Cranston	2,247 82
Sewer in Francis, Lincoln and Gaspee streets	97 80
Sewer in Grand avenue, from Angell street to Oriole avenue	339 05
Sewer in Hope street, from East avenue at Olney street to Thayer street, near Hope	2,108 25
Sewer in Melrose, Broad, Early and Colfax streets	1,929 49
Sewer in Wheaton and South Court streets	3,115 58
Sewer in Allen's avenue Division, Section 10	19 50
Sewer in Disposal Division, Section 4	6 00
Sewer in Elmgrove, Irving and Wayland avenues	13,070 94
Sewer in Siphon Division, Section 16	4 40
Brick buildings and chimney for sewage pumping station	15,261 29
Foundation for sewage pumping station	1,197 34
Holly sewage pumping engines	5,950 00
Steel roof for sewage pumping station	291 21
	$83,792 22

For maintenance, ... $10,209 86

Charged as follows:

Repairing basins and sewers	$3,613 70
Cleaning basins and sewers	3,095 15
Cleaning and repairing old drains	1,242 63
Inspection of connections	613 08
Tools	558 61
Salary—superintendent	390 00
Barn expenses	348 53
Horses, wagons, harnesses, etc	261 82
Cleaning private connections	48 00
Office expenses	17 81
Sundries	14 53
Filling cisterns, etc	6 00
	$10,209 86

The *net* expenditure for construction of sewers to June 30, 1896, inclusive, was $5,705,848 93

The *net* expenditure for maintenance of sewers to June 30, 1896, inclusive, was $488,139 76

Bills deposited with the City Treasurer for collection from April 1 to June 30, 1896, inclusive, amounted to $266 49

Digitized by Google

As follows:

Pumping out cellars, etc.	$97 20
Cleaning private connections	93 00
Building track inlet for New England Railroad Company	25 00
Sewer material	39 08
Laying drains to curbstone	9 00
Amount refunded by Maryland Steel Company	3 21
	$266 49

During the quarter coupons from bills collected have been returned by the City Treasurer and receipted for, amounting to . . . $179 14

As follows:

Cleaning private connections	$93 50
Pumping out cellars, etc.	34 35
Sewer material	39 08
Laying drains to curbstone	9 00
Amount refunded by Maryland Steel Company	3 21
	$179 14

HIGHWAYS.

Eight permits to open streets were issued during the quarter.

April 30th, the proposal of the Rhode Island Concrete Company to fill the joints of granite block paving with pea gravel and paving cement during the year 1896, was accepted.

During the quarter assessments of the cost of concreting sidewalks, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, viz.:

Digitized by Google

Angell street, from Prospect to Benefit	$27 78
Taber avenue, from Angell street to Irving avenue	9 90
East Manning street, from Governor to Wayland avenue	52 11
Pine street, from Beacon avenue to Hay street	20 91
South Main street, from Power to Transit	55 88
Transit street, from Brook to Hope	26 30
Livingstone street, from West River to North Main	454 35
Cranston street, from Messer to the city line (balance)	192 07
Washington avenue, from Broad street to Maryland avenue (balance)	473 94
In sundry streets under authority of city council resolution No. 446, approved September, 27, 1895	790 32
	$2,103 56

By chapter 724 of the ordinances, approved June 2, 1896, so much of chapter 637 as authorized the paving of Washington street, from Eddy street to Walker street, with granite blocks, under resolution No. 151, approved April 5, 1895, was repealed.

During the quarter the following work was completed:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
June 20, 1895,	*Frank street, from Plain to Beacon avenue.*
Sept. 19, "	*Greeley street, from Charles to Opper.*
" " "	*Wood street, from Ellery to Huntington avenue.*

To Bring to Sub-Grade and Put in Good Condition.

No. of resolution.	Date of approval.	
518.	Sept. 25, 1894,	*Washington avenue, from Broad street, to Maryland avenue.*
518.	" " "	*Massachusetts avenue, from Broad street to Maryland avenue.*
518.	" " "	*Virginia avenue, from New York avenue to Montgomery.*

Digitized by Google

To Build.

No. of resolution.	Date of approval.	
331.	June 27, 1895,	*Pitman street, from Wayland avenue to East River street.*

To Re-Build.

282.	June 15, 1895,	*Benefit street, from Wickenden to North Main.*

To be Paved with Granite Blocks.

151.	April 5, 1895,	*Peck street, from Weybosset to Dyer.*
151.	" " "	*Hay street, from Weybosset to Friendship.*

To Set Bound Stone.

231.	May 26, 1896,	*Montgomery avenue, on the east line of Broad street.*

To Concrete Sidewalks.

417.	Sept. 19, 1895,	*Cranston street, from Messer to the city line.*
417.	" " "	*Washington avenue, from Broad street to Maryland avenue.*
417.	" " "	*Angell street, from Prospect to Benefit.*
417.	" " "	*Transit street, from Brook to Hope.*
417.	" " "	*Livingstone street, from West River to North Main.*

Digitized by Google

No. of resolution.	Date of approval.	
417.	Sept. 19, 1895,	*South Main street, from Power to Transit.*
417.	" " "	*Oriole avenue, from Butler to Grand.*
417.	" " "	*Taber avenue, from Angell street to Irving avenue.*
417.	" " "	*East Manning street, from Governor to Wayland avenue.*
417.	" " "	*Pine street, from Beacon avenue to Hay street.*

The following work was in progress June 30, 1896, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Harris avenue, from Kinsley to Acorn street, and from Acorn to Eagle:*—nearly completed.
Sept. 19, "	*Forest street, from Ivy to East avenue:*—nearly completed.
" " "	*Linwood avenue, from Cranston street to Union avenue:*—in process.
May 21, 1896,	*Goddard street, from Douglas avenue to Candace street:*—in process.

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Kinsley avenue, from Gaspee street to Harris avenue:*—nearly completed.
151.	" " "	*Harris avenue, from Kinsley to Eagle street:*—three-fourths completed.

Digitized by Google

The following work, ordered by the board of aldermen and city council, had not commenced June 30, 1896, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Francis street, from Cove street and Exchange place to Gaspee street.*
" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
June 20, "	*Autumn street, from Eddy to Rugby.*
" " "	*Gordon avenue, from Oxford street to Gallup.*
Sept. 19, "	*Huntington avenue, from Cranston street to Union avenue.*
" " "	*River avenue, from Chalkstone to the brook on River avenue.*
" " "	*Lisbon street, from Chalkstone avenue to Regent.*
" " "	*Marlborough street, from East Beacon to Pearl.*
May 21, 1896,	*Globe street, from Beacon avenue to Plain street.*
" " "	*Blackstone street, from Eddy to Allen's avenue.*
" " "	*Beach street, from Park to Holden.*
June 18, "	*Blackstone street, north side, from Plain to Culver.*
" " "	*Fuller street, from Wilson to Sprague.*

Digitized by Google

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Gaspee street, from Cove to the railroad bridge abutment.*
151.	" " "	*Gaspee street, from Kinsley avenue to first angle east of Francis street.*
151.	" " "	*Francis street, from Cove and Exchange place to Gaspee street.*
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
151.	" " "	*The two approaches to the proposed depot in Exchange place.*

To be Paved with Granite Blocks and Cobble Stones.

543.	Dec. 17, 1895,	*Eddy street, from Henderson to Public.*

To Purchase Erect and Maintain.

271.	June 7, 1895,	*Six public urinals in central part of the city.*

To be Paved with Trinidad Asphalt.

261.	June 2, 1896,	*Washington street, from Walker to Dorrance.*
261.	" " "	*Snow street, from Washington to Westminster.*
282.	" 24, "	*Fulton street, from Eddy to Dorrance.*
283.	" " "	*Washington street, from Eddy to Dorrance.*

Digitized by Google

To Reduce Width of Sidewalks.

No. of resolution. Date of approval.

271. June 19, 1896, *Fulton and Washington streets, adjoining City Hall.*

Bills approved on account of highways from April 1 to June 30, 1896, inclusive, amounted to:

Regular appropriation	$47,699 71	
Special appropriation	56,525 84	
Special credit appropriation	5,655 15	
		$109,880 70

Classified as follows:

Cleaning streets	$18,293 08	
Repairs on unpaved streets	9,359 32	
Repairs on paved streets	4,632 72	
Crushed stone—material and labor	3,500 73	
Barn expenses	2,343 08	
Blacksmith and wheelwright shop	2,105 01	
Tools, implements, etc	1,801 84	
Labor on material	1,763 12	
Repairs on stone crushers	679 84	
Removing snow and ice	655 00	
Steam rollers—repairs and supplies	611 88	
Horses, wagons, harnesses, etc	463 49	
Salaries—superintendent and clerks	442 00	
Fencing streets—material and labor	293 86	
Building driveways, etc	200 51	
Watering streets	157 23	
Watchman at city yard	156 00	
Sundries	126 85	
Screening gravel	69 48	
Office expenses, city yard	28 67	
Repairing sidewalks and driveways opposite public buildings	16 00	
		47,699 71

New Work—Building and Re-building Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Forest street, from Ivy to East avenue	$743 68	
Frank street, from Plain to Beacon avenue	1,081 24	
Goddard street, from Douglas avenue to Candace street.	927 03	
Greeley street, from Charles to Opper	1,680 72	
Amounts carried forward	$4,432 67	$47,699 71

Digitized by Google

Amounts brought forward	$4,432 67	$47,699 71
Huntington avenue, from Cranston street to Union avenue	270 73	
Kinsley avenue, from Gaspee street to Harris avenue	5,661 81	
Linwood avenue, from Cranston street to Union avenue	638 75	
Marlborough street, from East Beacon to Pearl	11 20	
River avenue, from Chalkstone to the brook on River avenue	1,287 30	
Wood street, from Ellery to Huntington avenue	1,035 96	
		13,338 42

PAVE WITH GRANITE BLOCKS.

Dyer street, from Ship to end of pavement near Friendship	$12,192 30	
Friendship street, from Chestnut to Dyer	19 20	
Gaspee street, from Cove to the railroad bridge abutment.	800 86	
Gaspee street, from Kinsley avenue to first angle east of Francis street	1,187 53	
Harris avenue, from Kinsley to Eagle street	16,892 63	
Hay street, from Weybosset to Friendship	2,257 54	
Orange street, from Weybosset to Dyer	2 00	
Peck street, from Weybosset to Dyer	1,916 60	
Pine street, from Beacon avenue to Hay street	707 46	
		35,976 12

PAVE WITH TRINIDAD ASPHALT.

Washington street, from Walker to Eddy and from Eddy to Dorrance	491 27

TO GRADE AND PUT IN GOOD CONDITION.

Massachusetts avenue, from Broad street to Maryland avenue	$532 52	
Virginia avenue, from New York to Montgomery	128 40	
Washington avenue, from Broad street to Maryland avenue	452 63	
		1,113 55

BUILD.

Pitman street, from Wayland avenue to East River street	1,963 79

RE-BUILD.

Benefit street, from Wickenden to North Main	9,297 84
	$109,880 70

Bills deposited with the City Treasurer for collection from April 1 to June 30, 1896, inclusive, amounted to $7,953 92

Digitized by Google

As follows:

Union Railroad Company for granite blocks, etc.....	$5,793 22
Labor and materials.....	1,155 21
Blacksmith and harness work done for other departments	717 90
Manure from barn.....	74 00
Old iron.....	59 21
Street sweepings.....	50 00
Disharging cargoes at city wharf.....	49 88
Old harness.....	25 00
Steel plow beam.....	22 50
Removing trees.....	7 00
	$7,953 92

During the quarter coupons from bills collected have been returned by the City Treasurer and receipted for, amounting to . . . $2,718 83

As follows:

Union Railroad Company for granite blocks, etc.....	$1,075 14
Blacksmith and harness work done for other departments	702 34
Labor and materials.....	653 76
Manure from barn.....	74 00
Old iron.....	59 21
Street sweepings.....	50 00
Disharging cargoes at city wharf.....	49 88
Old harness.....	25 00
Steel plow beam.....	22 50
Removing trees.....	7 00
	$2,718 83

Sidewalks and Curbing.

The expenditures on account of sidewalks and curbing from April 1 to June 30, 1896, inclusive, amounted to $8,259 01

Charged as follows:

Granite curbing.....	$5,433 95
Concreting sidewalks.....	2,825 06
	$8,259 01

Digitized by Google

Curbing bills deposited with the City Treasurer for collection, from April 1 to June 30, 1896, inclusive, amounted to $783 15

During the quarter coupons from curbing bills collected have been returned by the City Treasurer and receipted for, amounting to . . $8,316 79

CITY ENGINEER.

Bills approved on account of the City Engineer's department from April 1 to June 30, 1896, inclusive, amounted to $10,553 26

Charged as follows:

Salary—city engineer	$500 00
Salaries of assistants	8,232 61
Salaries of clerks	763 75
Car fares	410 25
Supplies—drawing materials, etc	379 84
Instruments and repairs	249 80
Sundries	17 01
	$10,553 26

Bills deposited with the City Treasurer for collection from April 1 to June 30, 1896, inclusive, amounted to $29 69

As follows:

One transit	$25 00
Blue process paper	4 69
	$29 69

During the quarter coupons from bills collected have been returned by the City Treasurer and receipted for, amounting to . . . $29 69

As follows:

One transit	$25 00
Blue process paper	4 69
	$29 69

Digitized by Google

BRIDGES.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.			
48.	Jan.	19,	1894,	*New city yard, Henderson street:*—to grade and fence.
511.	Sept.	25,	"	*Red bridge, over the Seekonk river:*—nearly completed.
89.	Feb.	26,	1895,	*Washington row bridge:*—nearly completed.
252.	June	7,	"	*Promenade street bridge over the Moshassuck river:*—nearly completed.
346.	July	10,	"	*Exchange bridge, over the Providence river:*—abutments and piers completed.

Bills approved on account of bridges from April 1 to June 30, 1896, inclusive, amounted to $39,438 84

Charged as follows:

Barn expenses	$87 34
Building at city yard	3 75
Burnside bridge	26 80
Central or Red bridge	260 03
Crawford street bridge	3,901 29
Exchange bridge—to rebuild	20,160 91
Gaspee street bridge	120 62
Horses, wagons, harnesses, etc	47 29
Lumber, hardware, etc	5 45
Point street bridge	482 11
Promenade street bridge over Moshassuck river—to build	11,673 88
Rent of keeper's house, Washington bridge	30 00
Salaries—Central or Red bridge	501 75
Salaries—Point street bridge	978 25
Salaries—Washington bridge	481 00
Sundries	19 66
Tar bridge, Manton avenue	9 01
Amount carried forward	$38,789 14

Digitized by Google

Amount brought forward	$38,789 14	
Tools	133 51	
Wanskuck bridge	5 10	
Washington bridge	226 86	
Washington row bridge—to rebuild	272 73	
Weybosset bridge	11 50	
	$39,438 84	

Bills approved from April 1 to June 30, 1896, inclusive, for the construction of the new Red bridge, have been paid from the special appropriation for that work to the amount of $663 92

Bills deposited with the City Treasurer for collection from April 1 to June 30, 1896, inclusive, amounted to $61 65

As follows:

Union Railroad Company for plank on Washington bridge	$51 55	
Old lumber from various bridges	10 00	
	$61 55	

During the quarter coupons from bills collected have been returned by the City Treasurer (for old lumber sold) and receipted for to the amount of $10 00

PUBLIC WORKS OFFICE.

Bills approved from April 1 to June 30, 1896, inclusive, for account of the Public Works Office, amounted to $4,831,06

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,821 91
Office supplies	84 15
	$4,831 06

ROBERT E. SMITH,

Commissioner.

Digitized by Google

FIFTY-FIFTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1896.

P 72359

REMINGTON PRINTING CO., CITY PRINTERS,
63 Washington Street.
1896.

Digitized by Google

Digitized by Google

FIFTY-FIFTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1896.

REMINGTON PRINTING CO., CITY PRINTERS,
63 Washington Street.
1896.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72359
ASTOR, LENOX AND
TILDEN FOUNDATIONS.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., October 1, 1896.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-fifth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending September 30, 1896:

WATER WORKS.

July 3d, the offer of R. B. Little & Co. to deliver at Pettaconset Pumping Station, George's Creek Cumberland coal until July 1, 1897, was accepted.

July 20th, the offer of Chapman Valve Manufacturing Company to furnish and deliver in this city six twelve-inch gates, twenty-five sixteen-inch gates and two twenty-four-inch gates for the separate system for fire protection, was accepted. Amount, $2,506.90.

July 20th, the offer of Coffin Valve Company to furnish and deliver one twenty-four-inch check valve for the separate system for fire protection, was accepted. Amount, $550.00.

The average daily consumption of water during the last quarter was 9,496,446 gallons.

Digitized by Google

Water pipes were laid during the quarter, as follows:

16-inch.	
In line with Brayton avenue, extended south	231.36 feet.
12-inch.	
In West Exchange street	174.30 feet.
10-inch.	
In West Exchange street	461.34 feet.
8-inch.	
In Montgomery avenue; in Pontiac street, town of Cranston	800.71 feet.
6-inch.	
In Dowling place, Grand Broadway, Avon, Bartlett, Benedict, Calender, Clemence, Hamlin, Kepler, Larch, Lewis, McDonough, Mt. Vernon, Pratt, Porter, Richardson, Stansbury, Touro, Vinton streets; Grand, Oriole, Rhode Island, Rockland avenues; in Monument, Station streets; Branch, Colonial, Doric, Franklin, Glenwood, Hawthorn, Lawn, Waldron, Webster and Whipple avenues, town of Cranston	7,286.62 feet.
	8,[illegible]4.33 feet.

or, 1.695+miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,810.39 feet.
12-inch	86,316.85 feet.
10-inch	14,929.78 feet.
8-inch	250,944.52 feet.
6-inch	1,079,055.45 feet.
Total	1,588,213.65 feet.

or, 300.798+miles.

Eleven fire hydrants were set during the quarter, one in each of the following locations:

Atwell's avenue, north side, 85 feet east of Academy avenue.
Hannah street, southwest corner of Amsterdam street.
Hendrick street, northeast corner of Carleton street.
Kepler street, north side, about 381 feet east of Academy avenue.
McDonough street, northeast corner of Troy street.
Olney street, east side, about 77 feet south of Doyle avenue.

Digitized by Google

Rangely avenue, north side, 208 feet east of Sears avenue.
Richardson street, north side, about 190 feet west of Edly street.
Rockland avenue, northeasterly corner of Cambridge street.
Sears avenue, at the north corner of Cambridge street.
Touro street, east side, about 350 feet south of Branch avenue.

The total number of fire hydrants is now seventeen hundred and thirty-nine—sixteen hundred and seventy-three flush and sixty-six post hydrants.

During the quarter two hundred and thirty-one water meters were set, of which number seven were to replace other meters. The use of ten meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,173	635	140	32	6				3,995
Ball & Fitts, rotary			21	18	1	3	2		45
Crown	6,901	710	197	87	24	13	13		7,945
Fales, Jenks & Sons			1						1
Gem						1			1
Thomson	2,092	326	74	54	22	7	7	4	2,586
Trident	28								28
Worthington	2	1			1		1		5
	12,196	1,672	442	191	54	24	23	4	14,606

Three plumbers' licenses were issued during the quarter, making the total number one hundred and five, all of which expire December 31, 1896.

Seven hundred and eighty-six permits to do plumbing work were issued during the quarter.

One hundred and ninety-four applications for water were made during the quarter, making the total number September 30, 1896, twenty-one thousand five hundred and seventy-one.

Digitized by Google

The number of new service stops opened during the quarter was two hundred and ninety-four.

The total number of service stops opened to September 30, 1896, inclusive, was twenty thousand eight hundred and fifty-five. The number in actual use September 30, 1896, was nineteen thousand three hundred and eighty-two.

The amount of bills approved on account of water works from July 1 to September 30, 1896, inclusive, was:

For construction and extension . . . $62,723 71

Classified as follows:

Special water service for fire protection	$53,763 54	
Babcock and Wilcox boilers at Hope station—to erect	3,030 75	
Laying water pipes	2,630 32	
Laying service pipes	908 82	
Special castings	783 74	
Tools	259 28	
Barn expenses	258 68	
Taps and stops	251 28	
Wharf salaries	202 50	
Public drinking fountains and troughs	160 91	
Service pipe	160 73	
Labor on and carting pipe	135 94	
Fire hydrants, boxes and covers	61 62	
Barn at Fruit Hill reservoir—to build	51 68	
Horses, wagons, harnesses, etc	46 22	
Cast iron water pipe	16 35	
Holly high-duty compound engine at Hope station—to erect	1 35	
		$62,723 71

For maintenance $16,742 03

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,408 90
Sundries	632 95
Engineers	545 53
Firemen	441 75
Amount carried forward	$4,029 13

Digitized by Google

Amount brought forward	$4,[illegible] 13	
Superintendence	310 59	
Cornish engine house	214 62	
Corliss pumping engine and house	105 60	
Oil, waste and packing	104 01	
Barn expenses	98 99	
Care of grounds	38 95	
Labor on fuel	22 65	
Worthington high-duty pumping engine	9 21	
Lights	1 56	
Real estate	1 50	
Cornish pumping engine	65	
		$4,932 28

Sockanosset Reservoir.

Watchman	$190 00	
Sundries	19 27	
		209 27

Hope Pumping Station.

Engineers	$597 37	
Firemen	465 85	
Care of grounds	141 75	
Lights	75 18	
Sundries	66 36	
Oil, waste and packing	30 77	
		1,377 28

Hope Reservoir.

Watchman	$224 87	
Sundries	1 25	
		226 12

Fruit Hill Reservoir.

Sundries	$718 05	
Watchman	213 75	
		931 80

Pipe Line and Service Stops.

Repairs	$2,722 34	
Superintendence—salaries	924 27	
		3,646 61

Meter Department.

Water Meters	$1,[illegible] 47	
Setting and repairing meters	1,315 [illegible]	
		2,[illegible]

Amount carried forward	$14,[illegible]

Digitized by Google

Amount brought forward		$14,269 01

MISCELLANEOUS.

Clerks' and inspectors' salaries	$1,278 32	
Telephone lines	540 00	
Prevention of defilement of the Pawtuxet	217 59	
Barn expenses	145 11	
Analyses of water	90 00	
Public drinking fountains and troughs	56 10	
Sundries	54 25	
Horses, wagons, harnesses, etc	53 37	
Pipe yard, office expenses	38 28	
		2,473 02
		$16,742 03

The amount of expenditures from July 1, to September 30, 1896, inclusive, was . . $79,465 74

The total expenditures to September 30, 1896, inclusive, were $8,360,435 74

The *net* expenditure for construction and extension from July 1 to September 30, 1896, inclusive, was	$58,986 79
The *net* expenditure for construction and extension to September 30, 1896, inclusive, was	6,233,000 54
The *net* expenditure for maintenance from July 1 to September 30, 1896, inclusive, was	10,472 68
The *net* expenditure for maintenance to September 30, 1896, inclusive, was	1,335,831 65

Bills deposited with the city treasurer for collection from July 1 to September 30, 1896, inclusive, amounted to $65,023 82

As follows:

Water	$53,223 33
Water meters	5,385 00
Setting and repairing meters	1,744 90
Rent of real estate	145 50
Hay at Sockanosset reservoir	40 00
Penalties	18 00
Permanently closing service stops	10 00
Examinations and repairs of pipe line	4 50
Amount carried forward	$60,571 23

Digitized by Google

Amount brought forward	$60,571 23
Laying water pipe for the J. A. Budlong & Son Co.	2,021 23
Labor and material, laying service pipes, etc.	1,745 87
Cast iron water pipe	482 69
One brown horse	200 00
Pig lead	2 80
	$65,023 82

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $64,724 02

As follows:

Water	$54,699 75
Water Meters	4,530 75
Setting and repairing meters	1,521 20
Rent of real estate	150 50
Hay at Sockanosset reservoir	40 00
Penalties	18 00
Examination and repairs of pipe lines	16 90
Permanently closing service stops	10 00
Labor and material, laying service pipes, etc	3,736 92
	$64,724 02

The amount of bills approved on account of water works for the fiscal year ending September 30, 1896, inclusive, was:

For construction and extension, . . $126,587 21

Classified as follows:

Special water service for fire protection	$53,766 94
Cast iron water pipe	28,306 62
Laying water pipe	11,330 29
Holly high-duty compound engine at Hope station —to erect	5,036 35
Special castings	4,071 87
Laying service pipe	3,827 21
Babcock and Wilcox boilers at Hope station—to erect	3,346 64
Stop valves	3,167 75
Fire hydrants, boxes and covers	3,031 37
Amount carried forward	$115,885 04

Digitized by Google

Amount brought forward	$115,885 04	
Worthington high-duty pumping engine	2,500 00	
Taps and stops	1,992 84	
Service pipe	1,439 79	
Barn expenses	1,049 32	
Labor on and carting pipe	1,005 68	
Tools	874 48	
Horses, wagons, harnesses, etc	795 70	
Wharf salaries	785 00	
Public drinking fountains and troughs	160 91	
Barn at Fruit Hill reservoir—to build	51 68	
Sundries	30 70	
Repairs on pipe yard buildings	16 07	
		$126,587 21

For maintenance, ... $80,575 08

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$11,802 29	
Sundries	2,828 09	
Engineers	2,237 98	
Firemen	2,099 75	
Lights	1,208 76	
Superintendence	1,200 93	
Corliss pumping engine and house	475 19	
Oil, waste and packing	332 01	
Cornish engine house	270 23	
Barn expenses	230 07	
Worthington high-duty pumping engine	219 83	
Care of grounds	207 60	
Labor on fuel	166 05	
Real estate	86 75	
Worthington pumping engine	77 71	
Cornish pumping engine	1 13	
		$23,444 37

SOCKANOSSET RESERVOIR.

Watchman	$734 00	
Sundries	506 89	
		1,240 89

HOPE PUMPING STATION.

Engineers	$2,310 48	
Firemen	1,712 45	
Coal and wood	1,627 24	
Sundries	537 73	
Lights	406 42	
Care of grounds	321 00	
Amounts carried forward	$6,915 32	$24,685 26

Digitized by Google

Amounts brought forward	$6,915 32	$24,685 26
Hope pumping engine, No. 2	208 51	
Oil, waste and packing	75 40	
		7,199 23
HOPE RESERVOIR.		
Watchman	$834 62	
Sundries	719 22	
		1,553 84
FRUIT HILL RESERVOIR.		
Sundries	$1,861 75	
Watchman	825 75	
		2,687 50
PIPE LINE AND SERVICE STOPS.		
Repairs	$9,442 24	
Superintendence—salaries	3,586 90	
		13,029 14
METER DEPARTMENT.		
Water meters	$11,601 99	
Setting and repairing meters	5,498 36	
		17,100 35
MISCELLANEOUS.		
Town of Cranston, tax	$5,069 68	
Clerks' and inspectors' salaries	4,591 43	
Prevention of defilement of the Pawtuxet	1,413 39	
Barn expenses	809 78	
Horses, wagons, harnesses, etc	623 16	
Telephone lines	559 90	
Town of North Providence, tax	400 00	
Analyses of water	360 00	
Pipe yard, office expenses	203 00	
Sundries	169 30	
Public drinking fountains and troughs	81 62	
Town of Lincoln, tax	21 00	
Real estate at Pawtuxet	17 50	
		14,319 76
		$80,575 08

SEWERS.

During the quarter ending September 30, 1896, two hundred and ninety-four permits were issued to drain layers—one hundred and seventy-four for new work and one hundred and twenty for extension and repairs of drains.

One drain layer's license was issued during the quarter, making the total number forty-five, all of which expire December 31, 1896.

Digitized by Google

August 3d, the offer of New England Steam Brick Company to haul sewer brick to the sewer in Pleasant Valley Division, Section 19, improved sewerage system, was accepted.

July 21st, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To Watson & Sherman.

No. of resolution.	Date of approval.				
302.	June	27,	1896,	*Broad and Oxford streets,*	$1,243 36
306.	"	"	"	*Thayer street, from Arnold to Transit,*	311 61

To Frederick E. Shaw.

303.	June	27,	1896,	*Burrington street and Jackson avenue,*	$2,663 30
304.	"	"	"	*Felix street, from Chalkstone avenue to Valley street,* .	980 90

To George R. Newman & Co.

305.	June	27,	1896,	*Jewett street, from Park to Holden,* .	$337 40

August 3d, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

To Frederick E. Shaw.

No. of resolution.	Date of approval				
159.	April	17,	1896,	*Pleasant Valley, Division Section 19, Improved Sewerage System,*	$30,547 00

Digitized by Google

September 26th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

TO WATSON & SHERMAN.

No. of resolution.	Date of approval.				
385.	Sept.	23,	1896,	*University avenue, from Slater avenue to Blackstone Boulevard,*	$223 15
388.	"	"	"	*Milk and Richardson streets, Prairie avenue and Broad street,*	925 28
390.	"	"	"	*Baxter, Gladstone and Ontario streets,*	1,466 76

TO FREDERICK E. SHAW.

382.	Sept.	23,	1896,	*Esten street, from Orms to Smith,* .	$391 20
384.	"	"	"	*Paine street, from Cranston to Messer,*	666 30
387.	"	"	"	*Ruggles street and Chalkstone avenue,*	3,702 50
389.	"	"	"	*Chalkstone avenue, Lisbon street and Regent avenue,* .	2,744 20

TO GEORGE R. NEWMAN & CO.

383.	Sept.	23,	1896,	*Grove street, from Almy to Courtland,*	$568 38
386.	"	"	"	*Franklin, Lyman and Dean streets,* .	1,533 45

Digitized by Google

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of Completion.
148.	April	9,	1896,	*In line of Blackstone street, from Allen's avenue, easterly,* . . .	July 10, 1896
151.	"	"	"	*Hope street, from East avenue to Thayer street,* . .	Aug. 12, 1896
230.	May	26,	"	*Harris avenue, from Grove street to north of Atwell's avenue,*	Aug. 20, 1896
249.	"	29,	"	*President avenue and Blackstone boulevard,* . . .	Aug. 22, 1896
250.	"	"	"	*Globe street, from Beacon avenue to Plain street,* . .	Aug. 15, 1896
251.	"	"	"	*Harriet and Sayles streets,*	Aug. 26, 1896
252.	"	"	"	*Liberty street, from Smith street northerly,*	July 22, 1896
287.	June	24,	"	*Francis, Lincoln and Gaspee streets,*	July 24, 1896
302.	"	27,	"	*Broad and Colfax streets,*	Sept. 16. 1896
304.	"	"	"	*Felix street, from Chalkstone avenue to Valley street,* .	Sept. 16, 1896
305.	"	"	"	*Jewett street, from Park to Holden,* .	Sept. 22, 1896
306.	"	"	"	*Thayer street, from Arnold to Transit,*	Aug. 28, 1896

Digitized by Google

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
406.	July 15, 1889,	*Section 4, Disposal Division, Improved Sewerage system—Condensing Water Intake.*
406.	" " "	*Section 4, Disposal Division, Improved Sewerage system—Dredging for Condensing Water Intake.*
505.	Nov. 8, 1895,	*Elmgrove, Irving and Wayland avenues.*
159.	April 17, 1896,	*Davis Park and Pleasant Valley Division, Improved Sewerage System.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.	
303.	June 27, 1896,	*Burrington street and Jackson avenue.*
388.	Sept. 23, 1896,	*Milk and Richardson streets, Prairie avenue and Broad street.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced September 30, 1896, namely:

No. of resolution.	Date of approval.	
572.	Dec. 20, 1895,	*Moshassuck River and West River Divisions, Improved Sewerage System.*
382.	Sept. 23, 1896,	*Esten street, from Orms to Smith.*
383.	" " "	*Grove street, from Almy to Courtland.*

Digitized by Google

No. of resolution.	Date of approval.	
384.	Sept. 23, 1896,	*Paine street, from Cranston to Messer.*
385.	" " "	*University avenue, from Slater to Blackstone Boulevard.*
386.	" " "	*Franklin, Lyman and Dean streets.*
387.	" " "	*Ruggles street and Chalkstone avenue.*
389.	" " "	*Chalkstone avenue, Lisbon street and Regent avenue.*
390.	" " "	*Baxter, Gladstone and Ontario streets.*

The amount of bills approved on account of sewers from July 1, to September 30, 1896, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$27,378 81	
Improved sewerage appropriation	50,398 41	
		$77,777 22

Charged as follows:

Material	$9,868 82
Contract Reservations	3,761 36
Salaries of assistant engineers	1,161 50
Additional catch-basins	269 25
Sundries, improved sewerage system	234 61
Testing cement	232 47
Sundries	144 30
Tools	84 25
Sewer in line of Blackstone street, from Allen's avenue easterly	1,665 82
Sewer in Broad and Oxford streets	1,262 94
Sewer in Burrington street and Jackson avenue	711 90
Sewer in Felix street, from Chalkstone avenue to Valley street	1,073 21
Sewer in Francis, Lincoln and Gaspee streets	2,780 77
Sewer in Globe street, from Beacon avenue to Plain street	343 57
Sewer in Harriet and Sayles streets	705 77
Sewer in Harris avenue, from Grove street to north of Atwell's avenue	6,596 77
Amount carried forward	$30,897 31

Digitized by Google

Amount brought forward	$30,897 31
Sewer in Hope street, from East avenue at Olney street to Thayer, near Hope	3,043 75
Sewer in Jewett street, from Park to Holden	371 56
Sewer in Liberty street, from Smith northerly	196 62
Sewer in Milk and Richardson streets, Prairie avenue and Broad street	20 98
Sewer in President avenue and Blackstone Boulevard	2,648 22
Sewer in Thayer street, from Arnold to Transit	386 26
Sewer in Wheaton and South Court streets	8 75
Sewer in Disposal Division, Section 4	10,237 06
Sewer in Elmgrove, Irving and Wayland avenues	14,413 13
Sewer in Pleasant Valley Division, Section 19	12,385 88
Sewer in Siphon Division, Section 16	1 08
Brick buildings and chimney for sewage pumping station	2,005 96
Dredging channel for condensing water intake	1,050 80
Foundation for sewage pumping station	2 80
Holly sewage pumping engines	107 06
	$77,777 22

For maintenance: $11,755 98

Charged as follows:

Cleaning basins and sewers	$5,079 34
Repairing basins and sewers	3,346 47
Cleaning and repairing old drains	1,337 91
Inspection of connections	634 66
Tools	424 07
Salary—superintendent	405 00
Barn expenses	324 13
Horses, wagons, harnesses, etc	112 51
Cleaning private connections	38 00
Telephone lines	23 33
Office expenses	19 11
Sundries	11 45
	$11,755 98

The *net* expenditure for construction of sewers to September 30, 1896, inclusive, was $5,783,300 89

The *net* expenditure for maintenance of sewers to September 30, 1896, inclusive, was $499,567 44

Bills deposited with the city treasurer for collection from July 1 to September 30, 1896, inclusive, amounted to $828 76

Digitized by Google

As follows:

Rebuilding manholes for Union Railroad Co.	$242 90
Hoisting engine and pump	175 00
Cleaning private connections	54 00
Filling cisterns, etc	31 60
Sewer material	277 26
Laying drains to curbstone	46 00
Testing cement	2 00
	$828 76

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $653 56

As follows:

Hoisting engine and pump	$175 00
Filling cisterns, etc	70 30
Cleaning private connections	56 25
Building track inlet for New England Railroad Co.	25 00
Puddling sewer trench	1 75
Sewer material	277 26
Laying drains to curbstone	46 00
Testing cement	2 00
	$653 56

The amount of bills approved on account of sewers for the fiscal year, ending September 30, 1896, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$106,738 31	
Improved sewerage appropriation	282,945 63	
		$389,683 94

Charged as follows:

Material	$40,273 34
Contract reservations	19,819 00
Salaries of assistant engineers	10,224 39
Sundries, improved sewerage system	1,533 20
Sundries	825 76
Testing cement	825 67
Additional catch-basins	659 65
Tools	109 55
Laying drains to curbstone	12 09
Amount carried forward	$74,282 65

Digitized by Google

Amount brought forward	$74,282 65
Sewer in Adelaide avenue, from near Melrose street to Hamilton	421 91
Sewer in Althea street, from Cranston to Union avenue	1,318 06
Sewer in Andem street, from Academy avenue to Carleton street	688 97
Sewer in line of Blackstone street from Allen's avenue easterly	8,765 31
Sewer in Broad and Oxford streets	1,262 94
Sewer in Burrington street and Jackson avenue	711 90
Sewer in Camp street, from Doyle avenue to Howell street	1,059 03
Sewer in Chester avenue, from Milk street to Prairie avenue	255 69
Sewer in Dexter street, from Miller to Cranston	2,247 82
Sewer in Felix street, from Chalkstone avenue to Valley street	1,073 21
Sewer in Francis, Lincoln and Gaspee streets	2,878 57
Sewer in Francis street, northerly from West Exchange	3,033 29
Sewer in Globe street, from Beacon avenue to Plain street	343 57
Sewer in Goddard street, from Douglas avenue to Candace street	2,252 19
Sewer in Grand avenue, from Angell street to Oriole avenue	339 05
Sewer in Harriet and Sayles streets	705 77
Sewer in Harris avenue, from Acorn street to Woonasquatucket river	26,751 90
Sewer in Harris avenue from Grove street to north of Atwell's avenue	6,596 77
Sewer in Hope street, from East avenue at Olney street to Thayer, near Hope	5,152 00
Sewer in Jewett street, from Park to Holden	371 56
Sewer in Liberty street, from Smith northerly	196 62
Sewer in Melrose, Broad, Early and Colfax streets	1,929 49
Sewer in Milk and Richardson streets, Prairie avenue and Broad street	20 98
Sewer in Norwich avenue, from Broad street to Baxter	945 66
Sewer in Pierce street, from Courtland to Marshall	276 65
Sewer in President avenue and Blackstone boulevard	2,648 22
Sewer in Rhode Island and Grand avenues	1,867 96
Sewer in Roger Williams Park, Miller avenue and Broad street	2,907 27
Sewer in Stanwood street, from Hamilton to Public	1,105 48
Sewer in Sycamore street, from near Willow to Hudson	255 75
Amount carried forward	$152,666 24

Digitized by Google

Amount brought forward	$152,666 24
Sewer in Thayer street, from Arnold to Transit	386 26
Sewer in Van Zandt street, from Jackson avenue to Hamburg	593 46
Sewer in Wheaton and South Court streets	3,124 33
Sewer in Wellington street, from East Beacon to Pearl	406 65
Sewer in Allen's avenue Division, Section 10	13,672 96
Sewer in Allen's avenue Division, Section 11	6,974 73
Sewer in Disposal Division, Section 3	4,507 88
Sewer in Disposal Division, Section 4	10,243 06
Sewer in Elmgrove, Irving and Wayland avenues	28,170 82
Sewer in Moshassuck river Division, Section 17	7,989 60
Sewer in Moshassuck river Division, Section 18	37,423 21
Sewer in Norfolk and Station streets	561 46
Sewer in Pleasant Valley Division, Section 19	12,385 88
Sewer in Siphon Division, Section 15	4,022 11
Sewer in Siphon Division, Section 16	8,967 78
Brick buildings and chimney for sewage pumping station	61,172 77
Dredging channel for condensing water intake	1,050 80
Foundation for sewage pumping station	19,253 06
Grading Norfolk street, from Oak to Cranston	5,720 14
Holly sewage pumping engines	6,071 25
Steel roof for sewage pumping station	4,319 49
	$389,683 94

For Maintenance, ... $39,485 11

Charged as follows:

Cleaning basins and sewers	$14,661 56
Repairing basins and sewers	11,974 45
Cleaning and repairing old drains	3,973 38
Inspection of connections	2,626 26
Tools	1,915 78
Salary—superintendent	1,570 00
Barn expenses	1,402 11
Horses, wagons, harnesses, etc	845 37
Cleaning private connections	174 40
Office expenses	153 03
Filling cisterns, etc	95 46
Sundries	61 23
Telephone lines	23 33
Removing buildings to new city yard	8 75
	$39,485 11

Digitized by Google

HIGHWAYS.

Four permits to open streets were issued during the quarter.

July 1st, the offer of Smithfield Granite Company to reduce the width of the granite sidewalks on Washington and Fulton streets, adjoining the city hall, was accepted. Amount $3,295.00.

July 10th, the offer of Pomroy Coal Company to furnish George's Creek or Pocahontas coal, at their yard, was accepted.

August 5th, the proposal of the Narragansett Improvement Company to lay a Trinidad Pitch Lake asphalt pavement in Washington, Snow and Fulton streets was accepted and a contract subsequently executed.

Sept. 5th, the proposal of the Narragansett Improvement Company to lay a Trinidad Pitch Lake asphalt pavement in Union street, from Westminster street to Weybosset street, was accepted and a contract subsequently executed.

July 31st, curbing bills were certified to the assessors of taxes, aggregating $17,913.78.

During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Harris avenue, from Kinsley to Acorn street, and from Acorn to Eagle.*
June 20, "	*Autumn street, from Eddy to Rugby.*
" " "	*Gordon avenue from Oxford street to Gallup.*
Sept. 19, "	*Huntington avenue, from Cranston street to Union avenue.*
" " "	*River avenue, from Chalkstone to the brook on River avenue.*

Digitized by Google

Date of order.	
Sept. 19, 1895,	*Marlborough street, from East Beacon to Pearl.*
" " "	*Forest street, from Ivy to East avenue.*
" " "	*Linwood avenue, from Cranston street to Union avenue.*
May 21, 1896,	*Goddard street, from Douglas avenue to Candace street.*
Aug. 6, "	*Gaspee street, from the first angle south of Smith to Francis.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Kinsley avenue, from Gaspee street to Harris avenue.*
151.	" " "	*Harris avenue, from Kinsley to Eagle street.*
151.	" " "	*Gaspee street, from Kinsley avenue to first angle east of Francis street.*

TO REDUCE WIDTH OF SIDEWALKS.

271.	June 19, 1896,	*Fulton and Washington streets, adjoining city hall.*

TO BE PAVED WITH TRINIDAD ASPHALT.

347.	Sept. 2, 1896,	*Union street from Westminster to Weybosset.*

The following work was in progress September 30, 1896, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Francis street, from Cove street and Exchange place to Gaspee street*—one-half completed.

Digitized by Google

Date of order.	
May 16, 1895.	*Promenade street, from present end of pavement near railroad bridge to Steeple street*—one-half completed.

TO BE PAVED WITH TRINIDAD ASPHALT.

No. of resolution.	Date of approval.	
261.	June 2, 1896.	*Washington street, from Walker to Dorrance*—in process.
261.	" " "	*Snow street, from Washington to Westminster*—in process.
282.	" 24, "	*Fulton street, from Eddy to Dorrance*—in process.
283.	" " "	*Washington street, from Eddy to Dorrance*—in process.

TO GRADE AND PUT IN GOOD CONDITION.

315.	July 7, 1896,	*Allen's avenue, from Public street to Henderson.*

The following work, ordered by the board of aldermen and city council, had not commenced September 30, 1896, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Sept. 19, 1895.	*Lisbon street, from Chalkstone avenue to Regent.*
May 21, 1896.	*Globe street, from Beacon avenue to Plain street.*
" " "	*Blackstone street, from Eddy to Allen's avenue.*
" " "	*Beach street, from Park to Holden.*
June 18, "	*Blackstone street, north side, from Plain to Culver.*

Digitized by Google

Date of order.	
June 18, 1896.	*Fuller street, from Wilson to Sprague.*
Sept. 17, "	*Althea street, from Cranston to Union avenue.*
" " "	*Chambers street, from Huntington avenue to Potter's.*
" " "	*Lillian avenue, from Broad street, to Baxter.*
" " "	*Norwich avenue, from Broad street to Baxter.*
" " "	*Osborn street, from Vale to Chalkstone avenue.*
" " "	*Van Zandt street, from Jackson avenue to Hamburg.*
" " "	*Westfield street, from Harrison to Fuller.*
" " "	*Whitney street, from Elmwood avenue to Alger.*
" " "	*Silver Spring street, from Ashton to Branch avenue.*
" 23, "	*Dunwell's gangway, from Weybosset street to Dyer.*

To Take Possession.

Aug. 27, 1896.	*Huntington avenue, from Chambers street to Carter.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895.	*Gaspee street, from Cove to the railroad bridge abutment.*
151.	" " "	*Francis street, from Cove and Exchange place to Gaspee street.*
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
151.	" " "	*The two approaches to the proposed depot in Exchange place.*

Digitized by Google

To be Paved with Granite Blocks and Cobble Stones.

No. of resolution. Date of approval.

543. Dec. 17. 1895, *Eddy street, from Henderson to Public.*

Bills approved on account of highways from July 1 to September 30, 1896, inclusive, amounted to:

Regular appropriation	$65,804 82	
Special appropriation	60,773 43	
Special credit appropriation	5,326 22	
		$131,904 47

Classified as follows:

Cleaning streets	$19,140 07	
Repairs on unpaved streets	17,919 60	
Repairs on paved streets	13,726 22	
Crushed stone—material and labor	4,892 75	
Blacksmith and wheelwright shop	2,258 89	
Barn expenses	2,035 20	
Tools, implements, etc	1,474 02	
Labor on material	893 50	
Horses, wagons, harnesses, etc	633 63	
Steam rollers—repairs and supplies	500 74	
Repairs on stone crushers	494 39	
Building driveways, etc	489 44	
Salaries—superintendent and clerks	461 43	
Watering streets	186 00	
Watchman at city yard	162 86	
Sundries	128 05	
Reservation fund	62 00	
Fencing streets—material and labor	38 50	
Telephone lines	23 33	
Office expenses—city yard	20 60	
		$65,541 22

New Work—Building and Re-building Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Autumn street, from Eddy to Rugby	$1,267 65
Forest street, from Ivy to East avenue	1,547 22
Globe street, from Beacon avenue to Plain street	252 85
Goddard street, from Douglas avenue to Candace street	1,572 34
Gordon avenue, from Oxford street to Gallup	1,329 30
Amount carried forward	$5,969 36

Digitized by Google

Amount brought forward	$5,969 36	
Huntington avenue, from Cranston street to Union avenue	3,848 50	
Linwood avenue, from Cranston street to Union avenue	2,293 59	
Marlborough street, from East Beacon to Pearl	1,225 96	
River Avenue, from Chalkstone to the brook on River avenue	4,730 40	
		$18,067 81

PAVE WITH GRANITE BLOCKS.

Dyer street, from Ship to end of pavement near Friendship	$10 80	
Francis street, from Cove and Exchange Place to Gaspee street	3,718 81	
Gaspee street, from Kinsley avenue to first angle east of Francis street	13,985 97	
Harris avenue, from Kinsley to Eagle street	18,845 02	
Kinsley avenue, from Gaspee street to Harris avenue	1,124 66	
Peck street, from Weybosset to Dyer	1,723 54	
Promenade street, from present end of pavement near railroad bridge to Steeple street	512 99	
		$39,921 79

PAVE WITH GRANITE BLOCKS AND COBBLE.

Eddy street, from Henderson to Public		$3,779 00

PAVE WITH TRINIDAD ASPHALT.

Fulton street, from Eddy to Dorrance	$138 28	
Snow street, from Washington to Westminster	113 45	
Union street, from Westminster to Weybosset	1,266 23	
Washington street, from Walker to Dorrance	1,911 40	
		$3,429 36

TO GRADE AND PUT IN GOOD CONDITION.

Allen's avenue, from Henderson street to Public		325 60

TO REBUILD.

Benefit street, from Wickenden to North Main		839 69
		$131,904 47

Bills deposited with the city treasurer for collection from July 1, to September 30, 1896, inclusive, amounted to $29,675 94

Digitized by Google

As follows:

Labor and materials	$23,008 24
Union Railroad Co., for granite blocks, etc	5,290 34
Boarding horses for other departments	602 55
Blacksmithing done for other departments	451 89
New England Railroad Co., for granite blocks, etc.	134 92
Manure from barn	75 00
Discharging cargoes at city wharf	50 00
Street sweepings	46 00
Removing trees	15 00
Old shovels	2 00
	$29,675 94

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $33,807 52

As follows:

Labor and materials	$23,004 51
Union Railroad Co., for granite blocks, etc	9,841 35
Blacksmithing done for other departments	436 95
Boarding horses for other departments	321 71
Manure from barn	75 00
Street sweepings	61 00
Discharging cargoes at city wharf	50 00
Removing trees	15 00
Old shovels	2 00
	$33,807 52

Bills approved on account of highways for the fiscal year ending September 30, 1896, inclusive, amounted to:

Regular appropriation	$214,924 35	
Special appropriation	197,879 72	
Special credit appropriation	15,134 72	
		$427,938 79

Classified as follows:

Cleaning streets	$52,806 34
Repairs on unpaved street	48,011 70
Crushed stone—material and labor	31,412 28
Repairs on paved streets	19,875 16
Amount carried forward	$152,105 48

Digitized by Google

Amount brought forward	$152,105 48	
Barn expenses	9,500 40	
Tools, implements, etc	8,367 96	
Screening gravel	7,943 99	
Blacksmith and wheelwright shop	7,773 92	
Labor on materials	5,907 58	
Steam rollers, repairs and supplies	3,651 95	
Removing snow and ice	3,619 71	
Repairs on stone crushers	2,445 44	
Salaries, superintendent and clerks	1,781 76	
Horses, wagons, harnesses, etc	1,361 97	
Building driveways, etc	1,099 94	
Watchman at city yard	628 86	
Fencing streets, material and labor	500 07	
Sundries	461 28	
Watering streets	375 23	
Office expenses, city yard	212 26	
Reservation fund	62 00	
New brick workshop—to build	55 13	
Telephone lines	23 33	
Repairing sidewalks and driveways opposite Public buildings	16 00	
		$207,894 26

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Aborn street, from Cedar to West Exchange	$1,224 36	
Autumn street, from Eddy to Rugby	1,267 65	
Avenue deeded to the city, adjoining Roger Williams Park, from Broad street, to its westerly termination	4,667 72	
Forest street, from Ivy to East avenue	2,290 90	
Frank street, from Plain to Beacon avenue	1,081 24	
Fruit street, from Broad to Gordon avenue	114 50	
Globe street, from Beacon avenue to Plain street	252 85	
Goddard street, from Douglas avenue to Candace street	2,499 37	
Gordon avenue, from Oxford to Gallup	1,329 30	
Greeley street, from Charles to Opper	1,680 72	
Huntington avenue, from Cranston street to Union avenue	4,119 23	
Linwood avenue, from Cranston street to Union avenue	3,179 44	
Marlborough street, from East Beacon to Pearl	1,237 16	
Orchard street, from Oxford to Fruit	44 62	
Plum street, from Oxford to Fruit	42 16	
Reynolds avenue, from Broad street to Taylor	2,127 82	
Amounts carried forward	$27,159 04	$207,894 26

Digitized by Google

Amounts brought forward	$27,159 04	$207,894 26
Rhodes street, from Eddy to Allen's avenue	1,609 68	
River avenue, from Chalkstone to the brook on River avenue	7,575 23	
Silver Spring street, from Branch avenue to Charles street	3,065 41	
Sims avenue, from Harris to Kinsley	1,302 09	
West River street, from Branch avenue to bridge, north of McKenna street	1,737 99	
Wood street, from Ellery to Huntington avenue	1,035 98	
		43,485 40
PAVE WITH GRANITE BLOCKS.		
Clifford street, from Richmond to Dyer	2,637 88	
Cove street, from Sabin to West Exchange	16,176 84	
Dorrance street, from end of pavement near Pine to Dyer	3,560 92	
Dyer street, from Ship to end of pavement near Friendship	14,881 58	
Francis street, frove Cove and Exchange place to Gaspee street	3,718 81	
Friendship street, from Chestnut to Dyer	3,357 26	
Gaspee street, from Cove to railroad bridge abutment	800 86	
Gaspee street, from Kinsley avenue to first angle east of Francis street	15,173 50	
Harris avenue, from Kinsley to Eagle street	39,244 08	
Hay street, from Weybosset to Friendship	2,600 38	
Kinsley avenue, from Gaspee street to Harris avenue	9,631 72	
Orange street, from Weybosset to Dyer	3,103 70	
Peck street, from Weybosset to Dyer	4,382 47	
Pine street, from Beacon avenue to Hay street	11,007 44	
Promenade street, from present end of pavement near railroad bridge to Steeple street	512 99	
Traverse street, from Wickenden to Pike	2,656 47	
Washington street, from Eddy to Walker	2,585 01	
		136,031 91
PAVE WITH GRANITE BLOCKS AND COBBLE.		
Eddy street, from Henderson to Public		3,779 00
PAVE WITH TRINIDAD ASPHALT.		
Fulton street, from Eddy to Dorrance	$138 28	
Snow street, from Washington to Westminster	113 45	
Union street from Westminster to Weybosset	1,266 23	
Washington street, from Walker to Dorrance	2,402 67	
		3,920 63
TO GRADE AND PUT IN GOOD CONDITION.		
Allen's avenue, from Henderson street to Public	$325 60	
Maryland avenue, from New York to Massachusetts	287 86	
Amounts carried forward	$613 46	$391,332 20

Digitized by Google

Amounts brought forward	$613 46	$391,332 20
Massachusetts avenue, from Broad street to Maryland avenue	2,959 02	
Virginia avenue, from New York to Montgomery	286 48	
Washington avenue, from Broad street to Maryland avenue	1,733 54	
		5,592 50
To Build.		
East avenue, from Olney street to Rochambeau avenue	$7,139 61	
East River street, including Waterman to the new bridge	3,919 80	
Pitman street, from Wayland avenue to East River street	6,030 15	
		17,089 56
To Rebuild.		
Benefit street, from Wickenden to North Main		10,145 53
		$427,938 79

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from July 1 to September 30, 1896, inclusive, amounted to $15,348 88

Charged as follows:

Granite curbing	$7,960 21	
Concreting sidewalks	3,505 24	
Fulton and Washington streets—reducing width of of sidewalks adjoining city hall	3,301 29	
Setting curbing around schoolhouses and fire stations	582 14	
		$15,348 88

Curbing bills deposited with the city treasurer for collection from July 1, to September 30, 1896, inclusive, amounted to $476 81

During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . . $1,678 24

The expenditures on account of sidewalks and curbing for the fiscal year ending September 30, 1896, inclusive, amounted to . . $35,633 31

Digitized by Google

Charged as follows:

Granite curbing	$21,479 19
Concreting sidewalks	10,270 69
Fulton and Washington streets—reducing width of sidewalks adjoining city hall	3,301 29
Setting curbing around schoolhouses and fire stations	582 14
	$35,633 31

CITY ENGINEER.

Bills approved on account of the city engineer's department from July 1, to September 30, 1896, inclusive, amounted to $11,960 92

Charged as follows:

Salaries of assistants	$10,433 66
Salaries of clerks	793 12
Car fares	411 20
Supplies—drawing material, etc.	257 99
Instruments and repairs	42 13
Telephone lines	11 67
Sundries	11 15
	$11,960 92

Bills deposited with the city treasurer for collection from July 1, to September 30, 1896, inclusive, amounted to $1 45

As follows:

One transit book	60
Draughting on harbor chart	50
Blue process paper	35
	$1 45

During the quarter coupons for bills collected have been returned by the city treasurer and receipted for, amounting to $1 45

Digitized by Google

As follows:

One transit book	60
Draughting on harbor chart	50
Blue process paper	35
	$1 45

Bills approved on account of the city engineer's department for the fiscal year ending September 30, 1896, inclusive, amounted to . . . $46,546 34

Charged as follows:

Salary—city engineer	$3,500 00
Salaries of assistants	36,902 40
Salaries of clerks	3,034 58
Supplies—drawing material, etc	1,423 64
Car fares	1,266 40
Instruments and repairs	328 03
Sundries	67 47
Telephone lines	11 67
Meteorological instruments and repairs	10 15
Horse hire, etc	2 00
	$46,546 34

BRIDGES.

July 10th, the offer of Pomroy Coal Company to deliver at bridges, George's Creek or Pocahontas lump coal was accepted.

July 17th, the offer of Thomas W. Reilly for granite masonry for Promenade street bridge over the Moshassuck river was accepted.

August 5th, the proposal of The Narragansett Improvement Company to lay a Trinidad Pitch Lake asphalt pavement on the Promenade street bridge over the Moshassuck river, and Exchange bridge, was accepted and a contract subsequently executed.

During the quarter the following work was completed, namely:

Digitized by Google

No. of resolution.	Date of approval.			
511.	Sept.	25,	1894,	*Red bridge, over the Seekonk river.*
89.	Feb.	26,	1895,	*Washington row bridge.*
252.	June	7,	"	*Promenade street bridge over the Moshassuck river.*
346.	July	10,	"	*Exchange bridge, over the Providence river.*

The following work was in progress at the end of the the quarter, namely:

No. of resolution.	Date of approval.			
48.	Jan.	19,	1894,	*New city yard, Henderson street:* —to grade and fence.

Bills approved on account of bridges from July 1, to September 30, 1896, inclusive, amounted to $30,673 98

Charged as follows:

Barn expenses	$80 26
Branch avenue culvert	1 85
Building at city yard	30
Burnside bridge	203 81
Central or Red bridge	270 29
Crawford street bridge	717 15
Eagle street bridge	7 23
Exchange bridge—to rebuild	24,475 74
Francis street bridge	464 20
Horses, wagons, harnesses, etc	36 78
Lumber, hardware, etc	4 60
Point street bridge	682 27
Promenade street bridge, over Moshassuck river—to build	889 12
Rent of keeper's house, Washington bridge	30 00
Salaries—Central or Red bridge	533 25
Salaries—Point street bridge	1,063 25
Salaries—Washington bridge	533 64
Smithfield avenue bridge	3 51
Sundries	128 75
Telephone lines	11 67
Tools	127 87
Amount carried forward	$30,265 54

Digitized by Google

Amount brought forward	$30,265 54
Washington bridge	196 44
Washington Row bridge—to rebuild	147 09
West River street bridge	56 38
Weybosset bridge	5 73
Whelden street bridge	2 80
	$30,673 98

During the quarter coupons from bills collected for lumber sold, have been returned by the city treasurer and receipted for, to the amount of $51 55

Bills approved on account of bridges for the fiscal year ending September 30, 1896, inclusive, amounted to $114,694 84

Charged as follows:

Barn expenses	$358 47
Branch avenue culvert	1 85
Building at city yard	28 28
Burnside bridge	278 57
Central or Red bridge	756 08
Crawford street bridge	4,624 91
Eagle street bridge	7 23
Exchange bridge—to rebuild	62,203 84
Francis street bridge	464 20
Gaspee street bridge	120 62
Horses, wagons, harnesses, etc	155 08
Lumber, hardware, etc	107 30
Point street bridge	2,075 04
Promenade street bridge, over Moshassuck river—to build	14,908 03
Rent of keeper's house, Washington bridge	120 00
Salaries—Central or Red bridge	1,503 50
Salaries—Point street bridge	3,985 75
Salaries—Washington bridge	1,966 06
Smithfield avenue bridge	3 51
Sundries	466 32
Tar bridge—Manton avenue	9 01
Telephone lines	11 67
Tools	559 87
Valley street culvert	569 14
Wanskuck bridge	18 15
Amount carried forward	$95,302 48

Digitized by Google

Amount brought forward	$95,302 48
Washington bridge	800 97
Washington row bridge—to rebuild	18,513 98
West River street bridge	56 38
Weybosset bridge	17 23
Whelden street bridge	3 80
	$114,694 84

Bills approved for the construction of the new Red bridge have been paid from the special appropriation for that work as follows:

From July 1 to September 30, 1896, inclusive	$6,499 30
For the fiscal year ending September 30, 1896	41,801 88

PUBLIC WORKS OFFICE.

Bills approved from July 1, to September 30, 1896, inclusive, for account of the public works office, amounted to $5,047 67

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,915 74
Office supplies	206 93
	$5,047 67

Bills approved for account of the public works office for the fiscal year ending September 30, 1896, inclusive, amounted to $20,208 69

Charged as follows:

Salaries of commissioner and secretary	$7,700 00
Salaries of office assistants	11,915 87
Office supplies	592 82
	$20,208 69

Digitized by Google

FILLING COVE BASIN.

Bills approved during the fiscal year ending September 30, 1896, inclusive, for building the Promenade street bridge, over the Moshassuck river, have been paid for from the appropriation for filling the cove basin, to the amount of . . $5,580 28

CONTINGENCIES.

Bills approved for grading and fencing the new city yard have been paid during the fiscal year ending September 30, 1896, inclusive, from the appropriation for contingencies, to the amount of $39 38

ROBERT E. SMITH,

Commissioner.

Digitized by Google

FIFTY-SIXTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1896.

THE NEWBERRY PUBLIC LIBRARY
723

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1897.

Digitized by Google

Digitized by Google

FIFTY-SIXTH QUARTERLY REPORT

OF THE

epartment of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1896.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1897.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72360
ASTOR, LENOX AND
TILDEN FOUNDATIONS
N. Y.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., Jan. 1, 1897.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-sixth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending December 31, 1896:

WATER WORKS.

October 8th, the proposal of John W. Lyon to furnish and deliver taps and stops of various sizes, was accepted. Amount, $1,133.40.

December 12th, the offer of Chapman Valve Manufacturing Company to furnish and deliver six 6-inch post hydrants, was accepted. Amount, $318.

December 15th, the proposal of the Congdon & Carpenter Company to furnish and deliver the following material, was accepted, namely:

59,000 pounds lead pipe, various sizes.
100,000 pounds pig lead, "Anchor" brand.
900 pounds pig tin.

Amount, $5,058.55.

December 17th, the proposal of Fuller Iron Works to furnish special castings, service boxes, and castings for sewers, required during 1897, was accepted and a contract subsequently executed.

Digitized by Google

December 19th, the proposal of the McNeal Pipe and Foundry Company, of Burlington, N. J., to furnish and deliver about one hundred and sixty-two tons cast iron water pipes, was accepted and a contract subsequently executed.

December 22d, the offer of Coffin Valve Company, of Neponset, Mass., to furnish and deliver in this city the following water gates and fire hydrants, was accepted, namely:

5 8-inch water gates;
15 6-inch water gates;
15 4-inch water gates;
50 2½ inch water gates;
75 fire hydrants;
75 hydrant boxes, frames and covers.

Amount, $7,860.00.

The average daily consumption of water during the last quarter was 8,511,099 gallons, and the average daily consumption for the year 1896 was 9,106,623 gallons.

Water pipes were laid during the quarter as follows:

12-INCH.	
In Chalkstone avenue	358.70 feet.
8-INCH.	
In North Grove street; Chalkstone and Taber avenues; in Cranston and Rolfe streets, town of Cranston	2,561.35 feet.
6-INCH.	
In Dyerville Road; Abo, Amherst, Bullion, Cemetery, Exchange, Hall, Harvest, Hamilton, Job, Ledge, Lyman, Marion, Ontario, Osborn, Pekin, Pomfret, Pratt, Smith and Vale streets; Grand, Huntington, Indiana, Lexington and Reservoir avenues; in Doane and Pleasant streets; Crescent, Orchard, Reservoir and Terrace avenues, town of Cranston	8,235.03 feet.
Total	11,155.08 feet.

or, 2.112+miles.

Water pipes were removed during the quarter, as follows:

8-INCH.	
In Cranston street, at bridge over Pocasset river	190.13 feet.

or, .036+mile.

Digitized by Google

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,810,39 feet.
12-inch	86,675.55 feet.
10-inch	14,929.78 feet.
8-inch	253,315.74 feet.
6-inch	1,087,290.48 feet.
Total	1,599,178.60 feet.

or 302.874+miles.

Water pipes were laid for the Special Water Service for Fire Protection, during the quarter, as follows:

24-INCH.	
Across Exchange Bridge	146.18 feet.
16-INCH.	
In Aborn, Battey, Exchange, Mathewson, Washington, Westminster and Weybosset streets	4,510,45 feet.
12-INCH.	
In Eddy street	398.02 feet.
Total	5,054.65 feet.

or, .957+mile.

Sixteen fire hydrants have been set during the quarter, one in each of the following locations:

Amherst street, northeast corner of Joslin street.
Atwell's avenue, north side, opposite west line of Covell street.
Chalkstone avenue, north side, about 375 feet east of Rowley street.
Chalkstone avenue, west side, opposite north line of Brinton street.
Dutton street, southeast corner of Fowler street.
Dyerville road, southeast side, about 100 feet southerly from Chandler street.
Felix street, east side, about 183 feet north of Valley street.
Felix street, east side, about 222 feet south of Chalkstone avenue.
Hamlin street, north side, about 201 feet east of Stamford avenue.
Job street, east side, about 270 feet north of Ledge street.
Job street, northeast corner of Stark street.
Lavaughn street, east side, about 297 feet north of Amherst street.
Ledge street, north side, opposite east line of Hall street.
Ontario street, north side, about 245 feet west of Hamilton street.
Turner street, north side, about 317 feet west of Valley street.
Whipple avenue, Cranston, north side, about 167 feet west of Cranston street.

Digitized by Google

The total number of fire hydrants is now seventeen hundred and fifty-five—sixteen hundred and eighty-eight flush, and sixty-seven post hydrants.

During the quarter, two hundred and eighty-three water meters were set, of which number thirty-three were to replace other meters. The use of eleven meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾ in.	1-in.	1½ in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,180	631	149	32	6	.....	.....	.....	3,998
Ball & Fitts, rotary	.....	.....	21	17	1	3	2	.....	44
Crown	6,989	731	206	90	25	13	14	.....	8,068
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	1	3	.....	1	5
Thomson	2,200	328	74	54	22	7	7	4	2,696
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	2	1	.....	.....	1	.....	1	.....	5
	12,399	1,691	451	193	56	26	24	5	14,845

Three plumbers' licenses were issued during the quarter, making the total number one hundred and eight, all of which expired December 31, 1896.

Eight hundred and forty-six permits to do plumbing work were issued during the quarter.

One hundred and eighty-one applications for water were made during the quarter, making the total number December 31, 1896, twenty-one thousand seven hundred and fifty-two.

The number of new service stops opened during the quarter was one hundred and eighty.

The total number of service stops opened to December 31, 1896, inclusive, was twenty-one thousand and thirty-five. The number in actual use December 31, 1896, was nineteen thousand four hundred and four.

Digitized by Google

YEARS.	Lengths of Services Laid in Feet. Sizes of Pipe. ½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	Totals.	Trenching.	Paving.	Taps Used. ⅜ in.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	Stops Used. ⅜ in.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	Service Boxes Used.
1877....	2,776.8	8,679.3	1,884.4	248.8	114.2	7.	13,710.5	14,423.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878 ...	2,209.8	6,881.8	1,436.6	119.4	120.7	35.3	10,803.6	11,365.38	1,659.34	133	427	91	7	13	671	148	464	91	7	12	722	725
1879.. .	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.40	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880....	2,163.6	5,951.2	1,150.	483.6	186.1	16.9	9,951.4	10,468.87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881....	1,078.9	6,269.4	741.1	253.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882....	.....	8,073.8	581.3	226.4	92.	32.	9,005.5	9,481.5	1,020.	....	511	49	17	15	592	....	525	41	15	14	595	610
1883....	9.	8,075.83	761.09	143.	131.9	60.	9,180.82	9,649.5	1,284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884....	.....	8,048.72	732.2	266.3	119.6	23.2	9,190.02	9,715.5	1,054.6	....	512	64	18	17	611	....	539	51	15	13	618	641
1885....	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109.5	....	490	48	11	7	556	1	519	32	5	6	563	586
1886....	23.	7,764.6	699.5	115.4	98.6	25.4	8,726.5	9,213.5	965.5	....	481	64	13	12	570	....	518	49	7	11	585	609
1887....	... .	8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,164.1	....	516	47	11	11	585	...	543	32	7	10	592	612
1888....	.....	7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5	...	495	52	9	10	566	....	519	39	5	10	573	587
1889....	.....	9,211.9	514.2	199.	90.2	8.2	10,023.5	10,563.	1,125.5	..	546	53	18	10	627	....	579	37	12	6	634	664
1890....	.....	8,997.6	671.3	194.7	241.6	61.2	10,166.6	10,792.5	1,183.	...	549	58	17	16	640	....	586	42	11	15	654	680
1891....	.....	12,531.28	965.5	237.2	311.9	53.5	14,099.38	14,816.	1,445.	....	729	88	30	24	871	....	797	66	18	22	903	944
1892....	.....	14,672.27	1,284.6	152.9	248.8	.....	16,358.57	17,177.	1,945.5	....	853	103	22	17	995	....	943	75	9	17	1,044	1,093
1893....	.....	11,153.2	936.5	245.7	248.6	.....	12,584.	13,214.5	1,590.	....	672	81	24	17	794	....	727	65	14	16	822	851
1894...	.....	12,285.2	756.5	391.4	129.2	15.2	13,577.5	14,129 5	1,643.	....	724	59	33	12	828	. .	763	47	23	11	844	867
1895....	... .	10,258.5	954.2	142.	189.	.....	11,543.7	12,355.5	1,605.	....	635	68	9	21	733	....	668	56	6	12	742	767
1896....	.....	9,961.3	1,055.7	139.9	159.8	.....	11,316.7	11,981.5	1,364.	....	579	83	14	12	688	....	617	70	12	9	708	726
Totals..	9,919.9	178,773.78	17,676.39	4,089.1	2,996.8	457.7	213,913.67	225,307.79	27,571.28	612	10,859	1,361	343	278	13,453	645	11,564	1,125	251	247	13,832	14,221

Digitized by Google

The following table shows the lengths, sizes, etc., of services laid during the year ending December 31, 1896:

Months.	Lengths of Services Laid in Feet.								Taps Used.					Stops Used.					Service boxes used.
	Sizes of Pipe.						Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	Totals.			½ in.	⅝ in.	¾ in.	1 in.	Totals.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	
January	154.4	7.7	8.2	4.2	.....	174.5	182.	16.	7	1	1	1	10	8	1	1	1	11	11
February	154.4	.....	.....	.....	.....	154.4	161.5	22.	8	....	....	....	8	8	....	....	....	8	8
March	149.8	147.8	.....	.....	.....	297.6	300.	54.	9	6	...	....	15	9	6	....	....	15	15
April	1,940.5	196.3	8.2	.....	.....	2,145.	2,251.5	334.	112	15	1	2	130	117	14	1	....	132	135
May	1,437.4	136.	61.8	36.2	.....	1,671.4	1,875.5	201.	87	13	5	1	106	91	10	5	1	107	110
June	920.9	141.8	.....	.....	.....	1,062.7	1,112.5	122.	61	10	....	....	71	63	9	....	....	72	73
July	1,184.8	157.6	.....	.....	.....	1,342.4	1,407.	136.	60	13	1	....	74	71	9	....	....	80	85
August	793.3	104.7	19.1	.....	.....	917.1	947.5	94.	45	7	2	1	55	47	6	2	....	55	57
September	719.	43.6	16.4	52.4	.....	831.4	831.4	127.	43	5	2	2	52	45	4	2	2	53	53
October	1,151.	16.4	.....	.....	.....	1,167.4	1,167.4	118.5	65	3	....	...	68	69	2	....	...	71	72
November	737.8	53.	26.2	42.4	.....	859.4	859.4	76.	50	6	1	2	59	52	5	1	2	60	62
December	618.	50.8	.....	24.6	.....	693.4	729.	63.5	32	4	1	3	40	37	4	....	3	44	45
Totals	9,961.3	1,055.7	139.9	159.8	.....	11,316.7	11,981.5	1,364.	579	83	14	12	688	617	70	12	9	708	726

Digitized by Google

Changes in size and location of services in 1896:

Taps and Stops.										Sizes and Lengths of Lead Pipe.										Trenching.	Paving.	Change in size only.	Change in location only.	Changes in both size and location.	Change in length.
Taken Out.					Inserted.					Taken Out.					Inserted.										
⅜ inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	⅜ inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.						
84	78	14	14	6	.....	20	10	11	17	1,222.92	1,294.05	169.4	271.45	73.05	270.5	179.2	133.9	207.6	.....	3,323.6	1,412.1	42	10	6	41

142 services have been removed.

Digitized by Google

The following table exhibits the number of service stops opened each month from the commencement to December 31, 1896:

Months.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896
January	..	54	33	21	34	55	15	49	9	20	7	17	15	21	17	18	26	7	39	36	39	56	40	29	30	27
February	....	47	18	18	7	25	23	18	9	19	3	11	9	10	7	15	7	10	21	25	26	23	24	28	8	28
March	....	38	34	63	7	45	32	60	19	46	23	39	11	28	9	24	16	14	19	28	24	28	36	40	27	20
April	....	109	109	108	32	108	82	78	52	58	55	49	55	62	48	68	60	38	61	53	73	76	71	76	67	100
May	....	224	206	147	162	168	136	95	80	84	66	72	78	62	62	61	70	52	74	66	114	83	91	81	79	98
June	....	329	295	151	172	148	114	103	71	109	82	48	64	81	81	59	50	86	59	50	83	103	106	105	100	76
July	....	333	261	127	141	158	83	80	49	75	56	77	66	76	77	83	62	89	74	67	85	105	98	80	89	83
August	....	224	209	123	83	94	91	51	51	39	58	87	69	61	57	71	49	52	56	76	95	104	115	116	83	64
September	....	184	147	139	101	94	80	63	44	37	60	67	92	50	70	59	74	63	64	77	93	114	88	112	70	71
October	....	138	135	160	92	84	81	78	79	48	61	56	47	65	62	52	80	70	64	54	104	102	96	85	90	70
November	....	100	104	185	86	54	73	57	63	54	37	64	49	51	39	57	69	47	58	72	81	118	80	70	68	52
December	56	83	45	122	60	35	55	45	47	29	40	27	56	44	46	28	49	42	53	50	83	102	62	62	57	58
Totals	56	1,863	1,596	1,364	977	1,068	865	777	573	618	548	614	612	611	575	595	612	570	642	684	900	1,014	902	884	768	747

Digitized by Google

The receipts for water each year since the commencement have been as follows:

Year.	Amount.	Year.	Amount.
1872	$41,008 51	1885	$313,561 21
1873	97,386 09	1886	323,084 67
1874	132,052 39	1887	339,513 60
1875	165,144 71	1888	346,731 58
1876	183,868 73	1889	377,497 97
1877	200,039 39	1890	401,140 86
1878	218,883 33	1891	404,553 84
1879	229,551 78	1892	409,421 21
1880	247,705 06	1893	427,546 51
1881	260,530 87	1894	432,383 97
1882	269,318 77	1895	471,069 97
1883	283,632 89	1896	485,187 33
1884	302,368 36		

The amount of bills approved on account of water works from October 1 to December 31, 1896, inclusive, was:

For construction and extension . . . 38,949 38

Classified as follows:

Special water service for fire protection	$25,684 63
Holly high-duty compound engine at Hope station —to erect	5,129 77
Laying water pipes	3,434 21
Service pipe	1,292 75
Laying service pipes	769 33
Taps and stops	621 08
Special castings	506 50
Fire hydrants, boxes and covers	367 24
Tools	250 18
Barn expenses	239 02
Wharf salaries	187 50
Labor on and carting pipe	150 01
Stop valves	120 61
Barn at Fruit Hill reservoir—to build	91 67
Horses, wagons, harnesses, etc	70 75
Sundries	31 44
Babcock and Wilcox boilers at Hope station — to erect	2 69
	$38,949 38

Digitized by Google

For maintenance $30,243 94

Classified as follows:

Pettaconsett Pumping Station.		
Coal and wood	$2,745 22	
Corliss pumping engine and house	1,036 65	
Sundries	643 25	
Engineers	505 13	
Firemen	420 15	
Superintendence	287 50	
Worthington high-duty pumping engine	122 09	
Oil, waste and packing	70 22	
Cornish engine house	45 61	
Barn expenses	40 32	
Care of grounds	36 12	
Labor on fuel	35 05	
Real estate	30 00	
Lights	22 97	
		$6,040 28
Sockanosset Reservoir.		
Watchman	$174 00	
Sundries	27 13	
		201 13
Hope Pumping Station.		
Engineers	$553 13	
Firemen	401 35	
Lights	106 68	
Care of grounds	53 25	
Sundries	50 18	
Oil, waste and packing	18 63	
Coal and wood	15 00	
Hope pumping engine, No. 2	5 17	
		1,203 39
Hope Reservoir.		
Watchman	$196 88	
Sundries	115 00	
		311 88
Fruit Hill Reservoir.		
Sundries	$464,09	
Watchman	195 75	
		659 84
Pipe Line and Service Stops.		
Repairs	$1,983 08	
Superintendence—salaries	854 03	
		2,837 11
Meter Department.		
Water meters	$8,860 74	
Setting and repairing meters	1,708 67	10,569 41
Amount carried forward		$21,823 04

Digitized by Google

Amount brought forward		$21,823 04
MISCELLANEOUS.		
Town of Cranston tax	$5,716 35	
Clerks' and inspectors' salaries	1,205 50	
Town of North Providence tax	400 00	
Prevention of defilement of the Pawtuxet	319 21	
Barn expenses	238 89	
Pipe yard, office expenses	200 69	
Sundries	103 30	
Analyses of water	90 00	
Public drinking fountains and troughs	44 22	
Horses, wagons, harnesses, etc	42 74	
Real estate at Pawtuxet	35 00	
Town of Lincoln tax	25 00	8,420 90
		$30,243 94

The amount of expenditures from October 1 to December 31, 1896, inclusive, was $69,193 32

The total expenditures to December 31, 1896, inclusive, were $8,429,629 06

The *net* expenditure for construction and extension from October 1, 1896, to December 31, 1896, inclusive, was	$37,073 15
The *net* expenditure for construction and extension to December 31, 1896, inclusive, was	$6,270,073 69
The *net* expenditure for maintenance from October 1 to December 31, 1896, inclusive, was	$22,444 21
The *net* expenditure for maintenance to December 31, 1896, inclusive, was	$1,358,275 86

Bills deposited with the city treasurer for collection from October 1 to December 31, 1896, inclusive, amounted to . . $57,646 75

As follows:

Water	$49,070 03
Water meters	5,138 50
Setting and repairing meters	1,855 20
Rent of real estate	168 00
Permanently closing service stops	45 00
Penalties	24 00
Old scrap iron from meter department	6 90
Examination and repairs of pipe line	4 00
Labor and material, laying service pipes, etc	1,251 92
Cast iron water pipe	64 57
Stone removed from trench in Washington street	18 63
	$57,646 75

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $63,954 34

As follows:

Water	$54,254 38
Water meters	5,857 25
Setting and repairing meters	1,715 08
Rent of real estate	168 00
Permanently closing service stops	45 00
Penalties	24 00
Examination and repairs of pipe line	7 50
Old scrap iron from meter department	6 90
Labor and material, laying service pipes, etc	1,509 90
One brown horse	200 00
Cast iron water pipe	147 70
Stone removed from trench in Washington street	18 63
	$63,954 34

SEWERS.

During the quarter ending December 31, 1896, three hundred and sixty-one permits were issued to drain layers—two hundred and fourteen for new work, and one hundred and forty-seven for extension and repairs of drains.

December 2d, the proposal of the Narragansett Electric Lighting Company to install an electric light plant at the Ernest street Sewage Pumping Station, was accepted. Amount, $510.

December 15th, the offer of Chapman Granite Works, of Westerly, R. I., to furnish and deliver one hundred inlet curbstones for catch-basins, was accepted. Amount, $550.

December 21st, the proposal of Manchester & Hudson to furnish the cement required by the department of public works during the year 1897, delivered on the work, was accepted and a contract subsequently executed.

Digitized by Google

December 28th, the proposal of William A. H. Grant to furnish and deliver vitrified sewer pipes, branches, etc., for the year 1897, was accepted and a contract subsequently executed. Amount, $3,899.97.

December 28th, the proposal of Manchester & Hudson to furnish flagstones, was accepted and a contract subsequently executed. Amount, $547.50.

December 28th, the proposal of the Long Island Brick Company to furnish and deliver 1,000,000 sewer bricks, was accepted, and a contract subsequently executed. Amount, $6,850.

December 28th, the proposal of Charles M. Kelly to furnish and deliver 500,000 sewer bricks, was accepted and a contract subsequently executed. Amount, $3,540.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Hamilton, Irving, and Melrose streets (opposite estate of Joseph J. Cooke)	$320 00

Sewers Built in Miles, to December 31, 1896.

ITEMS.	Kind.	Built Previous to 1896.	Built During 1896.	Total to Dec. 31, 1896.
Under regular appropriation	Brick.	30.626	1.052	31.678
Under regular appropriation	Pipe.	99.172	3.594	102.766
Under improved sewerage appropriation	Brick and Pipe.	19.789	2.150	21.939
Total miles of sewers		149.587	6.796	156.383

Digitized by Google

In addition to the foregoing there was also built 1,914.10 lineal feet of storm sewers.

During the year 142 catch-basins, and 84 extra inlets have been built, making a total to Dec. 31, 1896, of 3,785 catch-basins and 987 extra inlets.

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
406.	July	15,	1889,	*Section 4, Disposal Divison, Improved Sewerage system—Condensing Water Intake,* . . .	Nov. 2, 1896.
505.	Nov.	8,	1895,	*Elmgrove, Irving and Wayland avenues,*	Oct. 23, 1896.
303.	June	27,	1896,	*Burrington street and Jackson avenue,*	Nov. 4, 1896.
383.	Sept.	23,	"	*Grove street, from Almy to Courtland,*	Nov. 25, 1896.
385.	"	"	"	*University avenue from Slater to Blackstone Boulevard,*	Oct. 30, 1896.
386.	"	"	"	*Franklin, Lyman and Dean streets,* .	Nov. 17, 1896.
387.	"	"	"	*Ruggles street and Chalkstone avenue,*	Dec. 30, 1896.
388.	"	"	"	*Milk and Richardson streets, Prairie avenue and Broad street,*	Oct. 14, 1896.
390.	"	"	"	*Baxter, Gladstone and Ontario streets,*	Oct. 28, 1896.

Digitized by Google

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
406.	July 15, 1889,	*Section 4, Disposal Division, Improved Sewerage System—Dredging for Condensing Water Intake.*
159.	April 17, 1896,	*Davis Park and Pleasant Valley Division, Improved Sewerage System.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced December 31, 1896, namely:

No. of resolution.	Date of approval.	
572.	Dec. 20, 1895,	*Moshassuck River and West River Divisions, Improved Sewerage System.*
382.	Sept. 23, 1896,	*Esten street, from Orms to Smith.*
384.	" " "	*Paine street, from Cranston to Messer.*
389.	" " "	*Chalkstone avenue, Lisbon street and Regent avenue.*
456.	Nov. 21, "	*Irving and Broad streets.*
458.	" " "	*Pekin and Osborn streets and Franklin avenue.*
459.	" " "	*Vale and Danforth streets.*
485.	Dec. 4, "	*Peace and Bucklin streets.*

Digitized by Google

SEWER MAINTENANCE DEPARTMENT.

The following table shows the work performed by the department cleaning sewers, basins and drains, for the year 1896:

Months.	Old Work.								New Work.							Total deposit removed, cubic yards.
	Old Drains.			Sand Catchers.		Open Ditches.			Sewers.				Catch-Basins.			
	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Dead ends.	No. times examined.	Number cleaned.	Deposit removed, cu. yds.	
January	.....	.....	.....	....	.....	....	.....	.....	2	300	11.90	.....	2	465	493.25	505.15
February	.....	.....	.....	....	.....	2	75	9.65	1	250	3.	.....	1	281	404.	416.65
March	.....	.....	.....	....	.....	....	.....	.....	.....	.....	.....	.....	1	354	536.75	536.75
April	.....	.....	.....	6	32.	....	.....	.....	.....	.....	.....	.....	2	459	605.50	637.50
May	.....	.....	.....	....	.....	3	200	50.	2	1,000	6.	.....	2	543	774.80	830.80
June	.....	.....	.....	....	.....	....	.....	.....	46	8,220	27.25	.....	2	1,176	1,717.40	1,744.65
July	2	175	9.	....	.....	....	.....	.....	71	17,750	40.95	25	1	1,166	1,698.25	1,748.20
August	.....	.....	.....	....	.....	....	.....	.....	.....	.....	.....	.....	1	1,597	1,533.50	1,533.50
September	2	300	12.	....	.....	1	175	30.	.....	.....	.....	.....	2	1,210	1,524.20	1,566.20
October	.....	.....	.....	....	.....	....	.....	.....	2	450	2.	.....	1	860	867.20	869.20
November	.....	.....	.....	7	41.50	2	250	26.	17	3,550	3.55	.....	1	1,285	1,006.	1,077.05
December	.....	.....	.....	....	.....	....	.....	.....	1	2,600	288.92	.....	1	253	189.53	478.45
Totals	4	475	21.	13	73.50	8	700	115.65	142	34,120	383.57	25	17	9,649	11,350.38	11,944.10

Digitized by Google

The amount of bills approved on account of sewers from October 1 to December 31, 1896, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$16,310 72	
Improved sewerage appropriation	51,241 55	
		$67,552 27

Charged as follows:

Material	$3,248 67
Salaries of assistant engineers	3,030 75
Contract reservations	1,577 00
Additional catch-basins	1,535 92
Sundries, Improved Sewerage System	349 24
Testing cement	317 81
Sundries	173 07
Tools	5 45
Sewer in Baxter, Gladstone and Ontario streets	1,660 82
Sewer in Burrington street and Jackson avenue	2,343 78
Sewer in Franklin, Lyman and Dean streets	1,465 97
Sewer in Grove street, from Almy to Courtland	617 85
Sewer in Milk and Richardson streets, Prairie avenue and Broad street	983 55
Sewer in Ruggles street and Chalkstone avenue	4,999 10
Sewer in University avenue, from Slater to Blackstone boulevard	233 10
Sewer in Disposal Division, Section 4	7,140 26
Sewer in Elmgrove, Irving and Wayland avenues	6,254 48
Sewer in Pleasant Valley Division, Section 19	19,345 76
Brick buildings and chimney for sewage pumping station	4,224 88
Dredging channel for condensing water intake	3,653 29
Holly sewage pumping engines	4,230 40
Supplies for sewage pumping station	161 12
	$67,552 27

For maintenance, ... $9,499 35

Charged as follows:

Cleaning basins and sewers	$4,479 51
Repairing basins and sewers	1,549 08
Cleaning and repairing old drains	903 43
Tools	776 07
Inspection of connections	594 65
Barn expenses	382 53
Salary, superintendent	375 00
Amount carried forward	$9,060 27

Digitized by Google

Amount brought forward	$9,060 27	
Horses, wagons, harnesses, etc	206 52	
Sundries	88 30	
Office expenses	73 53	
Cleaning private connections	60 73	
Filling cisterns, etc	10 00	
	$9,499 35	

The *net* expenditure for construction of sewers to December 31, 1896 inclusive, was $5,850,304 45

The *net* expenditure for maintenance of sewers to December 31, 1896, inclusive, was $508,581 34

Bills deposited with the city treasurer for collection from Oct. 1 to Dec. 31, 1896, inclusive, amounted to $883 92

As follows:

Cleaning private connections	$93 30
Building track inlets for Union Railroad Co	55 63
Rebuilding manholes for Union Railroad Co	50 25
Building track inlets for New York, New Haven & Hartford Railroad Co	40 00
Filling cisterns, etc	23 75
Old manhole frame and cover	1 60
Sewer material	531 55
Laying drains to curbstone	87 84
	$883 92

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $1,034 16

As follows:

Rebuilding manholes for Union Railroad Co	$270 90
Cleaning private connections	93 30
Filling cisterns, etc	46 15
Building track inlets for New York, New Haven and Hartford Railroad Co	40 00
Building track inlets for Union Railroad Co	33 50
Old manhole frame and cover	1 60
Sewer material	460 87
Laying drains to curbstone	87 84
	$1,034 16

Digitized by Google

HIGHWAYS.

Four permits to open streets were issued during the quarter.

October 21st, a contract was entered into with the Narragansett Improvement Company to lay a Trinidad Pitch Lake Asphalt pavement in Dunwells gangway and Post Office court.

December 8th, the proposal of David M. Newall, of Westerly, R. I., to furnish and deliver two hundred thousand granite paving blocks, was accepted and a contract subsequently executed. Amount, $8,720.00.

December 15th, the proposal of Chapman Granite Works, of Westerly, R. I., to furnish and deliver one hundred pieces of circular curbing, was accepted. Amount, $315.00.

December 15th, the offer of Booth Bros., and Hurricane Isle Granite Company, to furnish and deliver one thousand lineal feet 14-inch crosswalk stone, was accepted. Amount, $325.00.

December 24th, the offer of Crabtree & Havey, of West Sullivan, Maine, to furnish and deliver thirty thousand lineal feet straight granite curbing, was accepted. Amount, $13,800.00.

December 24th, the offer of Crabtree & Havey to furnish and deliver one thousand lineal feet 20-inch crosswalk stone, was accepted. Amount, $340.00.

December 31, 1896, the total length of received streets was 207.646 miles.

143.1 miles of streets were curbed and built with gravel or broken stone.

Thirty-two miles of streets were paved as follows:

Granite blocks	25.10 miles.
Cobble stones	3 15 miles.
Brick	.48 miles.
Trinidad asphalt	2.72 miles.
Vulcanite	.55 miles.

Digitized by Google

In addition to the general patching necessary to maintain the streets in good repair, the following work has been done during the year ending December 31, 1896, namely:

New streets built	21,027 lineal feet.
Curbing set	39,530 lineal feet.
Streets rebuilt	15,000 lineal feet.
Streets re-surfaced	137,800 lineal feet.
Streets graded	5150 lineal feet.
Block pavement laid	19,837 square yards.
Asphalt pavement	13,251 square yards.
Cobble pavement laid	5,600 square yards.
Block paving relaid	49,583 square yards.
Concrete gutters and roadways built	7,934 square yards.
Asphalt gutters and roadways built	4,232 square yards.
Concrete sidewalks laid	12,065 square yards.
Concrete sidewalks patched and top dressed	5,763 square yards.
Crushed stone used	44,280 tons.
Screened gravel used	13,122 cubic yards.

1,508 notices to build or repair sidewalks were served upon the abutting owners during the year 1896.

The work was done, as follows:

By the abutting owners	1,334
By the city, at the expense of the abutting owners	146
Time for doing the work extended	20
Work not done	8

During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 21, 1896,	*Globe street, from Beacon avenue to Plain street.*
June 18, "	*Blackstone street, north side, from Plain to Culver.*
Sept. 17, "	*Althea street, from Cranston to Union avenue.*
" " "	*Lillian avenue, from Broad street to Baxter.*
" " "	*Van Zandt street, from Jackson avenue to Hamburg.*
" " "	*Silver Spring street, from Ashton to Branch avenue.*

Digitized by Google

Date of order.	
Sept. 23, 1896,	*Dunwells gangway, from Weybosset street to Dyer.*
Oct. 1, "	*Hawkins street, from Charles to Branch avenue.*
" 15, "	*Burrington street, from Fenner avenue to Jackson.*
" " "	*Felix street, from Chalkstone avenue to Valley street.*

TO BE PAVED WITH TRINIDAD ASPHALT.

No. of resolution.	Date of approval.	
261.	June 2, 1896,	*Washington street, from Walker to Dorrance.*
261.	" " "	*Snow street, from Washington to Westminster.*
282.	" 24, "	*Fulton street, from Eddy to Dorrance.*
283.	" " "	*Washington street, from Eddy to Dorrance.*
410.	Oct. 16, "	*Dunwells gangway, from Weybosset street to Dyer.*
418.	" 20, "	*Post Office court, from Dyer street to Weybosset.*

The following work was in progress December 31, 1896, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Francis street, from Cove street and Exchange place to Gaspee street*—one-half completed.
" " "	*Promenade street, from present end of pavement, near railroad bridge, to Steeple street*—one-half completed.
May 21, 1896,	*Blackstone street, from Eddy to Allens avenue*—partly graded.

Digitized by Google

Date of order.	
June 18, 1896,	*Fuller street, from Wilson to Sprague*—gutters to be concreted.
Sept. 17, "	*Norwich avenue, from Broad street to Baxter*—gutters to be concreted.
Oct 15, "	*Grand avenue, from Angell street to Oriole* avenue—gutters to be concreted.
" " "	*Oregon street, from Fillmore to Whipple*—curbing set.
" " "	*Rhode Island avenue, from Butler to Grand*—gutters to be concreted.

To Take Possession.

Aug. 27, 1896,	*Huntington avenue, from Chambers street to Carter*—in process.

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street*—one-half completed.

To Grade and Put in Good Condition.

315. July 7, 1896,	*Allens avenue, from Public street to Henderson.*

The following work, ordered by the board of aldermen and city council, had not commenced December 31, 1896, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 19, 1895,	*Lisbon street, from Chalkstone avenue to Regent.*

Digitized by Google

Date of order.	
May 21, 1896,	*Beach street, from Park to Holden.*
Sept. 17, "	*Chambers street, from Huntington avenue to Potters.*
" " "	*Osborn street, from Vale to Chalkstone avenue.*
" " "	*Westfield street, from Harrison to Fuller.*
" " "	*Whitney street, from Elmwood avenue to Alger.*
Oct. 15, "	*Lyman street, from Dean to Franklin.*
" " "	*Ruggles street, from Smith to Chad Brown.*
Nov. 19, "	*Grand avenue, from Angell street to South Angell.*
" " "	*Ontario street, from Melrose to Hamilton.*
Dec. 17, "	*Andem street, from Academy avenue to Canton street.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Gaspee street, from Cove to the railroad bridge abutment.*
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
151.	" " "	*The two approaches to the proposed depot in Exchange place.*
543.	Dec. 17, "	*Eddy street, from Henderson to Public.*

Bills approved on account of highways from October 1 to December 31, 1896, inclusive, amounted to:

Regular appropriation	$85,062 91	
Special appropriation	36,994 57	
Special credit appropriation	2,453 02	
		$124,510 50

Digitized by Google

Classified as follows:

Crushed stone—material and labor	$16,703 47	
Repairs on unpaved streets	16,301 00	
Cleaning streets	13,105 97	
Repairs on paved streets	9,972 10	
Barn expenses	2,733 00	
Blacksmith and wheelwright shop	2,126 66	
Tools, implements, etc	1,565 90	
Reservation fund	1,306 00	
Removing snow and ice	1,240 81	
Building driveways, etc	849 84	
Labor on material	829 39	
Repairs on stone crushers	612 60	
Steam rollers—repairs and supplies	579 14	
Horses, wagons, harnesses, etc	553 36	
Salaries—superintendent and clerks	422 57	
Screening gravel	394 21	
Stone—paving and crosswalk	239 98	
Watchman at city yard	149 14	
Sundries	128 76	
Office expenses—city yard	84 44	
Fencing streets—material and labor	28 00	
		$69,926 34

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Althea street, from Cranston to Union avenue	$2,417 35	
Blackstone street, from Eddy to Allens avenue	121 70	
Blackstone street, north side, from Plain to Culver	653 74	
Burrrington street, from Fenner avenue to Jackson	2,173 33	
Felix street, from Chalkstone avenue to Valley street	1,391 99	
Forest street, from Ivy to East avenue	50	
Fuller street, from Wilson to Sprague	848 21	
Globe street, from Beacon avenue to Plain	571 80	
Grand avenue, from Angell street to Oriole avenue	779 04	
Hawkins street, from Charles to Branch avenue	711 34	
Lillian avenue, from Broad street to Baxter	2,563 16	
Norwich avenue, from Broad street to Baxter	1,957 15	
Oregon street, from Fillmore to Whipple	163 35	
Rhode Island avenue, from Butler to Grand	2,570 59	
River avenue, from Chalkstone to the brook on River avenue	17 89	
Silver Spring street, from Ashton to Branch avenue	702 99	
Van Zandt street, from Jackson avenue to Hamburg	914 78	
		18,558 91
Amount carried forward		$88,485 25

Digitized by Google

Amount brought forward.....		$88,485 25

PAVE WITH GRANITE BLOCKS.

Francis street, from Cove and Exchange place to Gaspee street.....	$6,819 00	
Gaspee street, from Kinsley avenue to first angle east of Francis street.....	262 54	
Kinsley avenue, from Gaspee street to Harris avenue	230 33	
Promenade street, from present end of pavement near railroad bridge to Steeple street.....	97 85	
		7,409 72

PAVE WITH GRANITE BLOCKS AND COBBLE.

Eddy street, from Henderson to Public.....		2,452 52

PAVE WITH TRINIDAD ASPHALT.

Dunwells gangway, from Weybosset street to Dyer	$2,478 07	
Fulton street, from Eddy to Dorrance.....	2,064 15	
Post Office court, from Dyer street to Weybosset....	1,084 58	
Snow street, from Washington to Westminster.....	1,909 54	
Washington street, from Walker to Dorrance.....	18,529 17	
		26,065 51

TO GRADE AND PUT IN GOOD CONDITION.

Allens avenue, from Henderson street to Public.....		97 50
		$124,510 50

Bills deposited with the city treasurer for collection from October 1 to December 31, 1896, inclusive, amounted to $16,537 22

As follows:

Union Railroad Co., for granite blocks, etc.....	$13,059 87	
Labor and materials.....	2,762 80	
Blacksmith and harness work done for other departments.....	266 61	
Providence Gas Co., for granite blocks, etc.....	222 89	
Manure from barn.....	73 00	
Street sweepings.....	56 00	
Discharging cargoes at city wharf.....	44 25	
New England Railroad Co., for granite blocks, etc..	36 80	
Removing trees.....	15 00	
		$16,537 22

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $9,007 73

As follows:

Labor and material	$4,076 11
Union Railroad Co., for granite blocks, etc	3,823 69
Boarding horses for other departments	280 84
Blacksmith and harness work done for other departments	274 28
Providence Gas Co., for granite blocks, etc	222 89
New England Railroad Co., for granite blocks, etc.	134 92
Manure from barn	73 00
Street sweepings	56 00
Discharging cargoes at city wharf	44 25
Removing trees	21 75
	$9,007 73

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from October 1 to December 31, 1896, inclusive, amounted to $7,438 80

Charged as follows:

Granite curbing	$4,191 02
Concreting sidewalks	3,247 78
	$7,438 80

Curbing bills deposited with the city treasurer for collection from October 1 to December 31, 1896, inclusive, amounted to $414 96

During the quarter, coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . . . $667 09

Digitized by Google

CITY ENGINEER.

Bills approved on account of the city engineer's department from October 1 to December 31, 1896, inclusive, amounted to . . . $12,526 56

Charged as follows:

Salary—city engineer	$4,000 00
Salaries of assistants	7,215 25
Salaries of clerks	734 38
Supplies—drawing material, etc	288 37
Car fares	239 80
Telephone lines	30 00
Sundries	15 76
Instruments and repairs	3 00
	$12,526 56

Bills deposited with the city treasurer for collection from October 1 to December 31, 1896, inclusive, amounted to 82

As follows:

Transit book	$ 60
Blue process paper	22
	$ 82

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of 82

As follows:

Transit book	$ 60
Blue process paper	22
	$ 82

Digitized by Google

BRIDGES.

October 17th, the offer of Richard J. Baker to raise the draw of the Point street bridge, was accepted.

November 7th, the proposal of the Springfield Construction Company to build the steel superstructure of the Manton avenue or "Tar" bridge, was accepted on the part of the city of Providence and town of Johnston, and a contract subsequently executed. Amount, $2,536.00.

November 30th, the proposal of William M. Harris to furnish yellow pine lumber for the Manton avenue bridge, was accepted.

November 30th, the proposal of the Smithfield Granite Company to furnish granite bearing stones for Manton avenue bridge, was accepted.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894,	*New city yard, Henderson street* —to grade and fence.
404.	Oct. 6, 1896,	*Manton avenue (Tar Bridge) over the Woonasquatucket river.*

Bills approved on account of bridges from October 1 to December 31, 1896, inclusive, amounted to $11,531 03

Charged as follows:

Acorn street bridge	$78 42
Atwells avenue bridge	123 89
Barn expenses	95 05
Branch avenue bridge	88 00
Building at city yard	9 67
Amount carried forward	$395 03

Digitized by Google

Amount brought forward	$395 03
Burnside bridge	283 62
Cemetery street bridge	17 80
Central or Red bridge	163 54
Crawford street bridge	17 87
Eagle street bridge	4 20
Exchange bridge—to rebuild	3,774 47
Francis street bridge	261 30
Horses, wagons, harnesses, etc	7 88
Lumber, hardware, etc	34 80
Mill street bridge	32 58
Nash lane bridge	33 53
Park street bridge	27 70
Point street bridge	1,543 34
Promenade street bridge over Moshassuck river—to build	1,432 11
Randall street bridge	16 00
Rent of keeper's house, Washington bridge	30 00
Reservation fund	231 00
Salaries—Central or Red bridge	510 50
Salaries—Point street bridge	949 25
Salaries—Washington bridge	459 86
Sundries	212 07
Tar bridge, Manton avenue—to rebuild	63 40
Tar bridge, Manton avenue—to repair	4 23
Tools	153 71
Washington bridge	511 17
Washington row bridge—to rebuild	22 79
West River street bridge	221 50
Weybosset bridge	92 77
Whelden street bridge	23 01
	$11,531 03

Bills deposited with the city treasurer for collection from October 1 to December 31, 1896, inclusive, amounted to $2,464 40

As follows:

Union Railroad Co., for granite blocks and asphalt pavement	$2,432 30
Old rods from Red bridge	28 10
Old lumber from various bridges	4 00
	$2,464 40

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $2,464 40

As follows:

Union Railroad Co., for granite blocks and asphalt pavement	$2,432 30	
Old rods from Red bridge	28 10	
Old lumber from various bridges	4 00	
	$2,464 40	

Bills approved for the construction of the new Red bridge from October 1 to December 31, 1896, inclusive, have been paid from the special appropriation for that work to the amount of . . . $402 55

PUBLIC WORKS OFFICE.

Bills approved from October 1 to December 31, 1896, inclusive, for account of the public works office, amounted to $5,036 82

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,957 78
Office supplies	154 04
	$5,036 82

ROBERT E. SMITH,
Commissioner.

Digitized by Google

FIFTY-SEVENTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1897.

PUBLIC LIBRA
P 7236

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1897.

Digitized by Google

Digitized by Google

FIFTY-SEVENTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1897.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1897.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72361
ASTOR, LENOX AND
TILDEN FOUNDATIONS.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., April 1, 1897.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-seventh quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending March 31, 1897:

WATER WORKS.

January 18th, the proposal of The Pomroy Coal Company to furnish the teams required for teaming at the city pipe yard during the year 1897, was accepted.

January 18th, the proposal of John R. White & Son to furnish and deliver at Hope Pumping Station one hundred tons egg coal, was accepted. Amount, $475.

The average daily consumption of water during the last quarter was 8,599,768 gallons.

Water pipes were laid during the quarter as follows:

12-INCH.	
In Allens avenue	213.59 feet.
6-INCH.	
In Aland, Berkshire, Cemetery, Fred, Pomfret, Rowan, and Smith streets; and Grand avenue	1,429.11 feet.
Total	1,642.70 feet.

or, .311+ mile.

Digitized by Google

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,810.39 feet.
12-inch	86,889.14 feet.
10-inch	14,929.78 feet.
8-inch	253,315.74 feet.
6-inch	1,088,719.59 feet.
Total	1,600,821.30 feet.

or, 303.185+ miles.

Water pipes were laid for the Special Water Service for Fire Protection, during the quarter, as follows:

24-INCH.

In Exchange place	251.14 feet.

16-INCH.

In Exchange place; Aborn, Battey, Broad, Dean, Jackson, Westminster and Winslow streets	4,497.23 feet.
Total	4,748.37 feet.

or, .899+ mile.

Statement of sizes and lengths of pipe laid since the commencement of the work:

24-inch	397.32 feet.
16-inch	10,007.68 feet.
12-inch	398.02 feet.
Total	10,803.02 feet.

or, 2.046+ miles.

Two fire hydrants have been set during the quarter, one in each of the following locations:

Chalkstone avenue, northwest corner of Frederick street.
Smith street, southerly side, about 268 feet easterly from Old road.

The total number of fire hydrants is now seventeen hundred and fifty-seven—sixteen hundred and ninety flush, and sixty-seven post hydrants.

Digitized by Google

During the quarter, two hundred and six water meters were set, of which number six were to replace other meters.

The use of three meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,208	632	151	32	8	.....	.....	.....	4,031
Ball & Fitts, rotary	.....	.....	20	17	1	3	2	.....	43
Crown	7,067	737	211	92	25	13	15	.....	8,160
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	1	3	1	1	6
Thomson	2,271	329	74	54	22	7	7	4	2,768
Trident	26	.....	.....	.....	.....	.....	.....	.....	28
Worthington	2	1	.....	.....	1	.....	1	.....	5
	12,576	1,699	457	195	58	26	26	5	15,042

One hundred and one plumbers' licenses were issued during the quarter, all of which expire December 31, 1897.

Five hundred and fifty-two permits to do plumbing work were issued during the quarter.

Eighty-five applications for water were made during the quarter, making the total number March 31, 1897, twenty-one thousand eight hundred and thirty-seven.

The number of new service stops opened during the quarter was ninety-six.

The total number of service stops opened to March 31, 1897, inclusive, was twenty-one thousand one hundred and thirty-one. The number in actual use March 31, 1897, was nineteen thousand four hundred and thirty-nine.

The amount of bills approved on account of water works from January 1 to March 31, 1897, inclusive, was:

Digitized by Google

For construction and extension, . . . $30,398 08

Classified as follows:

Special water service for fire protection	$15,760 26	
Fire hydrants, boxes, and covers	7,475 61	
Babcock and Wilcox boilers at Hope Station—to erect	2,566 00	
Laying water pipes	969 22	
Laying service pipes	710 51	
Service pipe	656 68	
Taps and stops	543 90	
Special castings	533 46	
Stop valves	487 75	
Barn expenses	204 88	
Wharf salaries	195 00	
Tools	149 57	
Holly high-duty compound engine at Hope Station—to erect	88 50	
Labor on and carting pipe	31 00	
Horses, wagons, harnesses, etc	25 74	
	$30,398 08	

For maintenance, ... $15,415 25

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,457 60	
Sundries	614 01	
Engineers	525 33	
Firemen	426 90	
Superintendence	299 00	
Care of grounds	99 73	
Cornish engine house	97 70	
Worthington high-duty pumping engine	62 58	
Oil, waste and packing	55 38	
Barn expenses	50 90	
Labor on fuel	38 85	
Real estate	10 35	
Corliss pumping engine and house	6 67	
Worthington pumping engine	3 33	
Lights	1 89	
		$4,750 22

SOCKANOSSET RESERVOIR.

Watchman	$182 00	
Sundries	89 88	
		271 88
Amount carried forward		$5,022 10

Digitized by Google

Amount brought forward		$5,022 10
Hope Pumping Station.		
Engineers	$575 25	
Coal and wood	475 00	
Firemen	418 60	
Sundries	121 80	
Lights	96 39	
Oil, waste and packing	10 70	
Hope pumping engine, No. 2	1 00	
		1,698 74
Hope Reservoir.		
Watchman	$204 75	
Sundries	118 06	
		322 81
Fruit Hill Reservoir.		
Sundries	$277 21	
Watchman	204 75	
		481 96
Pipe Line and Service Stops.		
Repairs	$1,530 84	
Superintendence—salaries	891 10	
		2,421 94
Meter Department.		
Water meters	$1,862 92	
Setting and repairing meters	1,273 67	
		3,136 59
Miscellaneous.		
Clerks' and inspectors' salaries	$1,265 16	
Horses, wagons, harnesses, etc	319 25	
Prevention of defilement of the Pawtuxet	300 00	
Barn expenses	227 53	
Analyses of water	90 00	
Pipe yard, office expenses	57 81	
Sundries	55 00	
Public drinking fountains and troughs	16 36	
		2,331 11
		$15,415 25

The amount of expenditures from January 1 to March 31, 1897, inclusive, was $45,813 33

Digitized by Google

The total expenditures to March 31, 1897, inclusive, were $8,475,442 39

The *net* expenditure for construction and extension from January 1, 1897, to March 31, 1897, inclusive, was	$29,943 30
The *net* expenditure for construction and extension to March 31, 1897, inclusive, was	$6,300,016 99
The *net* expenditure for maintenance from January 1, 1897, to March 31, 1897, inclusive, was	$9,908 82
The *net* expenditure for maintenance to March 31, 1897, inclusive, was	$1,368,184 68

The present value of the water works system, as estimated by the city engineer, is as follows:

Pettaconset pumping station	$649,086 00	
Hope pumping station	143,667 00	
Sockanosset, Hope and Fruit Hill reservoirs	876,722 00	
Main lines and distribution pipes	2,070,184 00	
Miscellaneous items	205,409 00	
		$3,945,068 00

Bills deposited with the city treasurer for collection from January 1 to March 31, 1897, inclusive, amounted to $354,157 48

As follows:

Water	$347,225 57
Water meters	3,557 75
Setting and repairing meters	1,482 96
Changing water mains and services for town of Cranston	713 50
Penalties	254 00
Examination and repairs of pipe line	127 90
Rent of real estate	31 25
Permanently closing service stops	25 00
Labor and material, laying service pipes, etc	739 55
	$354,157 48

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $317,332 11

As follows :

Water	$311,116 90	
Water meters	3,689 75	
Setting and repairing meters	1,584 92	
Penalties	254 00	
Rent of real estate	150 50	
Permanently closing service stops	25 00	
Examination and repairs of pipe line	6 00	
Labor and material, laying service pipes, etc	505 04	
		$317,332 11

SEWERS.

During the quarter ending March 31, 1897, one hundred and fifty-three permits were issued to drain layers — sixty-five for new work, and eighty-eight for extension and repairs of drains.

Forty-six drain layers' licenses were issued during the quarter, all of which expire December 31, 1897.

March 23d, the proposal of Franklin A. Snow to build connections from the district mains to the main intercepting sewers at Point street, Elm street, and Westminster and Pine streets through Dyer street, was accepted and a contract subsequently executed.

March 23d, the proposal of Edward W. Everson to build connections from the district mains to the main intercepting sewers at Blackstone street, Dorrance street, College street, and North Main street, was accepted and a contract subsequently executed.

Digitized by Google

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Liberty street	$240 86
Grand avenue	590 10
Hope street	2,578 27
Francis street	3,108 14
Camp street	675 59
Thayer street	244 30
Wheaton and South Court streets	1,696 21
Globe street	675 84
Harris avenue	5,341 97
Melrose, Broad, Early and Colfax streets	3,813 91
Harriet and Sayles streets	1,667 20
President avenue and Blackstone boulevard	1,813 55
Dexter street	4,518 88
Elmgrove, Irving and Wayland avenues	12,784 52
Total	$39,749 34

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
406.	July 15, 1889,	*Section 4, Disposal Division, Improved Sewerage System—Dredging for Condensing Water Intake.*
159.	April 17, 1896,	*Davis Park and Pleasant Valley Division, Improved Sewerage System.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced March 31, 1897, namely:

No. of resolution.	Date of approval.	
572.	Dec. 20, 1895,	*Moshassuck River and West River Divisions, Improved Sewerage System.*
382.	Sept. 23, 1896,	*Esten street, from Orms to Smith.*
384.	" " "	*Paine street, from Cranston to Messer.*

Digitized by Google

No. of resolution.	Date of approval.			
389.	Sept.	23,	1896,	*Chalkstone avenue, Lisbon street and Regent avenue.*
456.	Nov.	21,	"	*Irving and Broad streets.*
458.	"	"	"	*Pekin and Osborn streets and Franklin avenue.*
459.	"	"	"	*Vale and Danforth streets.*
485.	Dec.	4,	"	*Peace and Bucklin streets.*

The amount of bills approved on account of sewers from January 1 to March 31, 1897, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$8,015 94	
Improved sewerage appropriation	21,706 56	
		$29,722 50

Charged as follows:

Material	$10,561 69
Contract reservations	5,326 00
Salaries of assistant engineers	3,308 50
Sundries, Improved Sewerage System	412 07
Sundries	228 00
Testing cement	91 50
Tools	31 78
Additional catch-basins	26 22
Sewer in Chalkstone avenue, Lisbon street, and Regent avenue	49 45
Sewer in Ruggles street and Chalkstone avenue	67 70
Sewer in Vale and Danforth streets	34 78
Sewer in Pleasant Valley Division, Section 19	6,585 14
Brick buildings and chimney for sewage pumping station	2,256 51
Dredging channel for condensing water intake	188 90
Supplies for sewage pumping station	478 66
Test wells for precipitation tank	75 60
	$29,722 50

For maintenance, ... $7,313 15

Charged as follows:

Cleaning basins and sewers	$3,727 93
Repairing basins and sewers	1,045 18
Inspection of connections	585 08
Amount carried forward	$5,358 19

Digitized by Google

Amount brought forward	$5,358 19	
Cleaning and repairing old drains	436 17	
Salary, superintendent	390 00	
Barn expenses	345 66	
Tools	335 17	
Sundries	256 15	
Cleaning private connections	97 92	
Office expenses	39 74	
Horses, wagons, harnesses, etc	35 55	
Filling cisterns, etc	18 60	
	$7,313 15	

The *net* expenditure for construction of sewers to March 31, 1897, inclusive, was $5,879,594 01

The *net* expenditure for maintenance of sewers to March 31, 1897, inclusive, was $515,714 21

Bills deposited with the city treasurer for collection from January 1 to March 31, 1897, inclusive, amounted to $560 71

As follows:

Filling cisterns, etc	$71 90
Cleaning private connections	67 25
Altering catch-basins for town of Johnston	59 30
Sewer material	347 00
Laying drains to curbstone	15 26
	$560 71

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $613 22

As follows:

Filling cisterns, etc	$71 90
Cleaning private connections	64 00
Rebuilding manholes, etc., for Union Railroad Co.	44 38
Sewer material	417 68
Laying drains to curbstone	15 26
	$613 22

Digitized by Google

HIGHWAYS.

Two permits to open streets were issued during the quarter.

March 20th, the proposal of the New England Granite Works to furnish and deliver two hundred thousand granite paving blocks, was accepted and a contract subsequently executed.

March 20th, the proposal of the Smithfield Granite Company to furnish and deliver fifty thousand granite paving blocks, was accepted and a contract subsequently executed.

February 8th, statements of the cost of concreting sidewalks in sundry streets, done under authority conferred by the city council by Resolution No. 446, approved September 27, 1895, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, amounting to the sum of $3,456.22.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows:

Blackstone street, north side, from Plain to Culver	$493 81
Burrington street, from Fenner avenue to Jackson	1,284 73
Felix street, from Chalkstone avenue to Valley street	1,178 44
Frank street, from Plain to Beacon avenue	708 95
Globe street, from Beacon avenue to Plain street	633 37
Lillian avenue, from Broad street to Baxter	951 24
Linwood avenue, from Cranston street to Union avenue	1,733 11
Oregon street, from Fillmore to Whipple	305 30
Van Zandt street, from Jackson avenue to Hamburg	621 56
Greeley street, from Charles to Opper	1,019 86
Marlborough street, from East Beacon to Pearl	689 20
River avenue, from Chalkstone to the brook on River	1,387 54
Wood street, from Ellery to Huntington avenue	752 68
Althea street, from Cranston to Union avenue	1,226 76
Autumn street, from Eddy to Rugby	568 29
Forest street, from Ivy to East avenue	797 61
Amount carried forward	$14,352 45

Digitized by Google

Amount brought forward	$14,352 45
Fuller street, from Wilson to Sprague	644 21
Hawkins street, from Charles to Branch avenue	449 32
Silver Spring street, from Ashton to Branch avenue	528 92
Goddard street, from Douglas avenue to Candace street	1,594 95
Grand avenue, from Angell street to Oriole avenue	322 16
Gordon avenue, from Oxford street to Gallup	778 59
Dunwell's gangway, (now Exchange street), from Weybosset street to Dyer	203 66
Francis street, from Cove and Exchange place to Gaspee street (a portion of)	587 84
Gaspee street, from first angle south of Smith to Promenade	844 16
Harris avenue, from Kinsley to Acorn street	3,335 73
Huntington avenue, from Cranston street to Union avenue	2,800 96
Norwich avenue, from Broad street to Baxter	915 39
Rhode Island avenue, from Butler to Grand	1,020 46
Stillman street, from Gaspee to Promenade	96 53
Total	$28,475 33

The following work was in progress March 31, 1897 namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
May 16, 1895,	*Francis street, from Cove and Exchange place to Gaspee street*—one-half completed.
" " "	*Promenade street, from present end of pavement, near railroad bridge, to Steeple street*—one-half completed.
May 21, 1896,	*Blackstone street, from Eddy to Allens avenue*—partly graded.
June 18, "	*Fuller street, from Wilson to Sprague*—gutters to be concreted.
Sept. 17, "	*Norwich avenue, from Broad street to Baxter*—gutters to be concreted.
Oct 15, "	*Grand avenue, from Angell street to Oriole* avenue—gutters to be concreted.
" " "	*Oregon street, from Fillmore to Whipple*—curbing set.
" " "	*Rhode Island avenue, from Butler to Grand*—gutters to be concreted.

Digitized by Google

To Take Possession.

Date of order.	
Aug. 27, 1896,	*Huntington avenue, from Chambers street to Carter*—in process.

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street*—one-half completed.

To Grade and Put in Good Condition.

315.	July 7, 1896,	*Allens avenue, from Public street to Henderson.*

The following work, ordered by the board of aldermen and city council, had not commenced March 31, 1897, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 19, 1895,	*Lisbon street, from Chalkstone avenue to Regent.*
May 21, 1896,	*Beach street, from Park to Holden.*
Sept. 17, "	*Chambers street, from Huntington avenue to Potters.*
" " "	*Osborn street, from Vale to Chalkstone avenue.*
" " "	*Westfield street, from Harrison to Fuller.*
" " "	*Whitney street, from Elmwood avenue to Alger.*
Oct. 15, "	*Lyman street, from Dean to Franklin.*
" " "	*Ruggles street, from Smith to Chad Brown.*
Nov. 19, "	*Grand avenue, from Angell street to South Angell.*
" " "	*Ontario street, from Melrose to Hamilton.*
Dec. 17, "	*Andem street, from Academy avenue to Canton street.*

Digitized by Google

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.			
151.	April	5,	1895,	*Gaspee street, from Cove to the railroad bridge abutment.*
151.	"	"	"	*Promenade street, from present end of pavement near railroad bridge to Steeple street.*
151.	"	"	"	*The two approaches to the proposed depot in Exchange place.*
543.	Dec.	17,	"	*Eddy street, from Henderson to Public.*

Bills approved on account of highways from January 1 to March 31, 1897, inclusive, amounted to:

Regular appropriation	$32,400 40	
Special appropriation	8,530 01	
		$40,930 41

Classified as follows:

Removing snow and ice	$10,767 42	
Cleaning streets	5,120 46	
Crushed stone—material and labor	3,878 24	
Blacksmith and wheelwright shop	2,572 71	
Barn expenses	1,969 11	
Steam rollers—repairs and supplies	1,727 14	
Tools, implements, etc	1,419 80	
Screening gravel	818 27	
Labor on material	714 93	
Horses, wagons, harnesses, etc	516 28	
Repairs on stone crushers	500 94	
Salaries—superintendent and clerks	442 00	
Repairs on paved streets	335 44	
Watchman at city yard	156 09	
Repairs on unpaved streets	145 00	
Office expenses—city yard	107 04	
Sundries	47 88	
Building driveways, etc	31 71	
		31,270 46
Amount carried forward		$31,270 46

Digitized by Google

Amount brought forward.....		$31,270 46

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Althea street, from Cranston to Union avenue.....	$529 65	
Blackstone street, from Eddy to Allens avenue.....	2,411 31	
Blackstone street, north side, from Plain to Culver..	524 14	
Burrrington street, from Fenner avenue to Jackson.	271 79	
Felix street, from Chalkstone avenue to Valley street	112 40	
Fuller street, from Wilson to Sprague.....	663 64	
Globe street, from Beacon avenue to Plain.....	410 00	
Hawkins street, from Charles to Branch avenue....	26 83	
Van Zandt street, from Jackson avenue to Hamburg	129 78	
Whitney street, from Elmwood avenue to Alger.....	20 49	
		5,100 03

Pave with Granite Blocks.

Francis street, from Cove and Exchange place to Gaspee street.....	$985 54	
Gaspee street, from Kinsley avenue to first angle east of Francis street.....	1,411 87	
Kinsley avenue, from Gaspee street to Harris avenue	456 02	
Promenade street, from present end of pavement near railroad bridge to Steeple street.....	20 25	
		2,873 68

Pave with Trinidad Asphalt.

Dunwell's gangway, from Weybosset street to Dyer	$19 50	
Post Office court, from Dyer street to Weybosset....	1,566 00	
Union street, from Westminster to Weybosset.....	10 44	
Washington street, from Walker to Dorrance.....	90 30	
		1,686 24
		$40,930 41

Bills deposited with the city treasurer for collection from January 1 to March 31, 1897, inclusive, amounted to $1,579 31

Digitized by Google

As follows:

Labor and materials	$621 46
Boarding horses for other departments	334 50
Blacksmith and harness work done for other departments	300 85
Street sweepings	158 00
Union Railroad Co., for granite blocks, etc	78 00
Manure from barn	73 00
Discharging cargoes at city wharf	13 50
	$1,579 31

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $9,800 12

As follows:

Union Railroad Co., for granite blocks, etc	$8,613 93
Boarding horses for other departments	334 50
Labor and material	321 44
Blacksmith and harness work done for other departments	285 75
Street sweepings	158 00
Manure from barn	73 00
Discharging cargoes at city wharf	13 50
	$9,800 12

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from January 1 to March 31, 1897, inclusive, amounted to $2,526 93

Charged as follows:

Granite curbing	$2,240 37
Concreting sidewalks	286 56
	$2,526 93

Digitized by Google

Bills deposited with the city treasurer for collection from January 1 to March 31, 1897, inclusive, amounted to $29,111 52

As follows:

Curbing	$29,031 74
Concreting sidewalks	79 78
	$29,111 52

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $5,019 05

As follows:

Curbing	$4,939 27
Concreting sidewalks	79 78
	$5,019 05

CITY ENGINEER.

Bills approved on account of the city engineer's department from January 1 to March 31, 1897, inclusive, amounted to . . . $11,706 68

Charged as follows:

Salary—city engineer	$1,500 00
Salaries of assistants	8,888 01
Salaries of clerks	763 75
Supplies—drawing material, etc	254 92
Car fares	238 35
Instruments and repairs	41 15
Sundries	18 25
Meteorological instruments and repairs	2 25
	$11,706 68

Digitized by Google

Bills deposited with the city treasurer for collection from January 1 to March 31, 1897, inclusive, amounted to $26 45

As follows:

One transit	$25 00
Blue process paper	1 25
Bottle of ink	20
	$26 45

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $1 45

As follows:

Blue process paper	$1 25
Bottle of ink	20
	$1 45

BRIDGES.

January 28, proposals for repairs at draw of the Point street bridge were accepted, as follows: The Benjamin Atha & Illington Company, for steel castings; Union Bridge Company, rolled steel, fastenings and labor; Fuller Iron Works, for labor.

Total amount, ... $2,618 96

During the quarter the following work was completed, namely:

No. of resolution.	Date of approval.	
404.	Oct. 6, 1896,	*Manton avenue (Tar Bridge) over the Woonasquatucket river.*

Digitized by Google

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894,	*New city yard, Henderson street* —to grade and fence.

Bills approved on account of bridges from January 1 to March 31, 1897, inclusive, amounted to $5,689 11

Charged as follows:

Acorn street bridge	$6 36
Barn expenses	82 81
Building at city yard	12 73
Experimental test for Weybosset bridge	72 32
Geneva bridge	3 10
Horses, wagons, harnesses, etc	11 51
Lumber, hardware, etc	307 60
Mill street bridge	28 27
Point street bridge	409 84
Randall street bridge	2 90
Red bridge	127 89
Rent of keeper's house, Washington bridge	30 00
Salaries—Red bridge	511 00
Salaries—Point street bridge	973 75
Salaries—Washington bridge	495 86
Sundries	240 46
Tar bridge, Manton avenue—to rebuild	1,833 73
Tools	301 46
Veazie street bridge	1 55
Wanskuck bridge	2 32
Washington bridge	144 65
Weybosset bridge	89 00
	$5,689 11

Digitized by Google

PUBLIC WORKS OFFICE.

Bills approved from January 1 to March 31, 1897, inclusive, for account of the public works office, amounted to $5,051 60

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,863 98
Office supplies	262 62
	$5,051 60

ROBERT E. SMITH,

Commissioner.

Digitized by Google

FIFTY-EIGHTH QUARTERLY REPOR

OF THE

Department of Public W

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 189

THE
PUBL
P

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1897.

Digitized by Google

Digitized by Google

FIFTY-EIGHTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1897.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1897.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72362
ASTOR, LENOX AND
TILDEN FOUNDATIONS

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., July 1, 1897.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-eighth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending June 30, 1897:

WATER WORKS.

June 24th, the proposal of the Narragansett Improvement Company to lay a Trinidad Lake asphalt pavement over the coal vaults and driveway at Hope Pumping Station for the sum of $2.25 per square yard, was accepted.

June 28th, the proposal of John R. White & Son to furnish and deliver at Hope Pumping Station 325 tons of egg coal at $4.75 per ton, was accepted.

The average daily consumption of water during the last quarter was 8,409,857 gallons.

Water pipes were laid during the quarter as follows:

12-INCH.	
In Gaspee street, Allens, East, and Kinsley avenues.....	525.37 feet.
10-INCH.	
In Old Gaspee street.....	120.69 feet.
Amount carried forward	646.06 feet.

Digitized by Google

Amount brought forward	646.06 feet.

8-INCH.

In Goff and Hawkins streets; and in Concord street, town of Johnston	1,429.73 feet.

6-INCH.

In Bark, Bedford, Bissell, Blackstone, Brownell, Cedar, Cheshire, Dixon, Duffy, Fourth, Hempstead, Larch, Longmont, Lorea, Quarry, Salina, Sorrento, Sussex, Stanwood, Whitmarsh, and Yorkshire streets; Academy, Andrews, Cliff, Irving, Swan, and Upton avenues, and Warners lane; and in Governor street, and Cory, Germania, Grand, and Harris avenues, in town of Cranston; and in Eutaw, Highland, Myrtle, Maple, Plain, and Whitehall streets; Prairie and Webster avenues, in town of Johnston	19,919.21 feet.
Total	21,995.00 feet.

or, 4.165+ miles.

Water pipes were removed during the quarter, as follows:

8-INCH.

Goff street and Kinsley avenue	5.82 feet.

or, .001+ mile.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,810.39 feet.
12-inch	87,414.51 feet.
10-inch	15,050.47 feet.
8-inch	254,739.65 feet.
6-inch	1,108,638.80 feet.
Total	1,622,810.48 feet.

or, 307.350+ miles.

Water pipes were laid for the Special Water Service for Fire Protection, during the quarter, as follows:

Digitized by Google

24-INCH.

In Back, Canal, Charles, Orms, and Smith streets	2,353.33 feet

16-INCH.

In Aborn, Broad, Exchange, Mathewson, West Exchange, and Weybosset streets	3,814.73 feet.

12-INCH.

In Sabin street	915.74 feet.
Total	7,083.80 feet.

or, 1.341+ miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

24-inch	2,750.65 feet.
16-inch	13,822.41 feet.
12-inch	1,313.76 feet.
Total	17,886.82 feet.

or, 3.387+ miles.

Thirteen fire hydrants have been set during the quarter, one in each of the following locations:

Andrews avenue, north side, about 350 feet north of Manton avenue, or about 200 feet west of Cliff avenue.
Blackstone street, north side, about 300 feet east of Eddy street.
Harris avenue, north side, about 905 feet west of Kinsley avenue.
Hawkins street, northeast corner of Glasgow street.
Irving avenue, north side, about 182 feet west of Slater avenue.
Ruggles street, east side, about 185 feet north of Smith street.
Ruggles street, east side, opposite Sparrow street.
Salina street, northwest corner of Cheshire street.
Stanwood street, north side, about 357 feet west of Broad street.
Sussex street, north side, 220 feet east of Cheshire street.
Swan avenue, east side, about 210 feet north of range of north line of Salter street.
Whitmarsh street, south side, about 226 feet east of Elmwood avenue.
Yorkshire street, north side, 180 feet east of Cheshire street.

The total number of fire hydrants is now seventeen hundred and seventy—seventeen hundred and three flush, and sixty-seven post hydrants.

During the quarter, two hundred and one water meters were set, of which number ten were to replace other meters. The use of six meters was discontinued.

Digitized by Google

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾ in.	1-in.	1½ in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,221	635	153	31	8	.....	.....	.....	4,048
Ball & Fitts, rotary	.....	.....	18	17	1	3	2	.....	41
Crown	7,137	746	220	95	25	13	15	.....	8,251
Empire	3	.....	2	.....	.....	.....	.....	.....	5
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	2	4	1	1	8
Thomson	2,343	329	74	54	22	7	7	4	2,840
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	2	1	.....	.....	1	.....	1	.....	5
	12,734	1,711	468	197	59	27	26	5	15,227

Nine plumber's licenses were issued during the quarter making the total number one hundred and ten, all of which expire December 31, 1897.

Nine hundred and sixty-six permits to do plumbing work were issued during the quarter.

Two hundred and forty applications for water were made during the quarter, making the total number June 30, 1897, twenty-two thousand and seventy-seven.

The number of new service stops opened during the quarter was two hundred and thirty-eight.

The total number of service stops opened to June 30, 1897, inclusive, was twenty-one thousand three hundred and sixty-nine. The number in actual use June 30, 1897, was nineteen thousand seven hundred and seventy.

The amount of bills approved on account of water works from April 1 to June 30, 1897, inclusive, was:

For construction and extension, . . . $33,644 68

Digitized by Google

Classified as follows :

Special water service for fire protection	$21,421 88
Holly high-duty compound engine at Hope station —to erect	4,979 20
Laying water pipes	4,461 86
Laying service pipes	1,001 14
Tools	471 50
Special castings	306 11
Labor on and carting pipe	256 30
Barn expenses	218 41
Wharf salaries	195 00
Horses, wagons, harnesses, etc	158 81
Cast iron water pipe	122 50
Repairs on pipe yard buildings	43 07
Stop valves	8 90
	$33,644 68

For maintenance, ... $19,874 34

Classified as follows :

PETTACONSET PUMPING STATION.

Coal and wood	$2,617 78	
Sundries	574 45	
Engineers	525 33	
Firemen	395 90	
Superintendence	299 00	
Care of grounds	172 98	
Oil, waste and packing	131 05	
Worthington high-duty pumping engine	79 56	
Barn expenses	57 25	
Labor on fuel	41 25	
Cornish engine house	10 00	
Real estate	8 15	
Lights	1 26	
		$4,913 96

SOCKANOSSET RESERVOIR.

Sundries	$187 32	
Watchman	182 00	
		369 32
Amount carried forward		$5,283 28

Digitized by Google

Amount brought forward		$5,283 28

Hope Pumping Station.

Coal and wood	$593 75	
Sundries	446 21	
Firemen	418 60	
Engineers	362 75	
Care of grounds	121 50	
Hope pumping engine, No. 2	91 76	
Lights	79 80	
Oil, waste and packing	6 79	
Holly pumping engine	4 50	
		2,125 66

Hope Reservoir.

Sundries	$403 96	
Watchman	204 75	
		608 71

Fruit Hill Reservoir.

Sundries	$516,35	
Watchman	204 75	
		721 10

Pipe Line and Service Stops.

Repairs	$2,675 54	
Superintendence—salaries	827 82	
		3,503 36

Meter Department.

Water meters	$3,882 31	
Setting and repairing meters	1,314 76	
		5,197 07

Miscellaneous.

Clerks' and inspectors' salaries	$1,265 16	
Horses, wagons, harnesses, etc	396 85	
Prevention of defilement of the Pawtuxet	300 00	
Barn expenses	262 19	
Analyses of water	90 00	
Sundries	54 53	
Pipe yard, office expenses	38 44	
Real estate at Pawtuxet	17 50	
Public drinking fountains and troughs	10 49	
		2,435 16
		$19,874 34

Digitized by Google

The amount of expenditures from April 1 to June 30, 1897, inclusive, was . . $53,519 02

The total expenditures to June 30, 1897, inclusive, were $8,528,961 41

The *net* expenditure for construction and extension from April 1 to June 30, 1897, inclusive, was	$25,814 61
The *net* expenditure for construction and extension to June 30, 1897, inclusive, was	$6,325,831 60
The *net* expenditure for maintenance from April 1 to June 30, 1897, inclusive, was	$13,623 54
The *net* expenditure for maintenance to June 30, 1897, inclusive, was	$1,381,808 22

The value of the water works system, as estimated by the city engineer, is as follows:

Amount estimated March 31, 1897	$3,945,068 00	
Net expenditures from March 31 to June 30, 1897	25,814 61	
		$3,970,882 61

Bills deposited with the city treasurer for collection from April 1 to June 30, 1897, inclusive, amounted to $63,422 05

As follows:

Water	$50,507 04
Water meters	3,643 25
Setting and repairing meters	1,361 70
Rent of real estate	236 56
Permanently closing service stops	50 00
Repairs on pipe line	42 53
Penalties	36 00
Laying water pipe for Narragansett Real Estate Co.*	7,000 00
Labor and material, laying service pipes, etc	544 97
	$63,422 05

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $91,514 49

Digitized by Google

As follows :

Water	$77,397 62
Water meters	3,670 75
Setting and repairing meters	1,507 51
Repairs on pipe line	854 54
Rent of real estate	168 00
Permanently closing service stops	50 00
Penalties	36 00
Laying water pipe for Narragansett Real Estate Co.	7,000 00
Labor and material, laying service pipes, etc	825 07
Use of boiler	5 00
	$91,514 49

SEWERS.

During the quarter ending June 30, 1897, four hundred and fifty-five permits were issued to drain layers — two hundred and eighty for new work, and one hundred and seventy-five for extension and repairs of drains.

Four drain layer's licenses were issued during the quarter, making the total number fifty, all of which expire December 31, 1897.

April 15th, the proposal of Builders Iron Foundry to furnish material for sewer gates and hinges for the improved sewerage system was accepted. Amount, $699.00.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

University avenue	$482 13
Burrington street and Jackson avenue	8,133 34
Felix street	2,524 65
Francis, Lincoln and Gaspee streets	7,675 69
Grove street	1,276 85
Jewett street	622 53
Baxter, Gladstone and Ontario streets	3,335 56
Broad and Oxford streets	3,044 66
Milk and Richardson streets, Prairie avenue and Broad street	1,971 04
Franklin, Lyman and Dean streets	2,408 33
Total	$31,474 78

Digitized by Google

April 13th, a contract for the construction of the following sewer was awarded, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To George R. Newman & Co.

No. of resolution.	Date of approval.		
105.	April 6, 1897,	*Friendship street, from end of sewer about 40 feet southwesterly from Prince street,*	$60 90

April 23d, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

To William H. Sherman.

No. of resolution.	Date of approval.		
456.	Nov. 21, 1896,	*Irving and Broad streets,*	$749 24
485.	Dec. 4, "	*Peace and Bucklin streets,*	1,466 63
133.	April 12, 1897,	*Whitmarsh, Gilmore, D, and Booth streets,*	1,219 27
134.	" " "	*Miner, Sayles, and Oxford streets, and Lexington avenue,*	1,878 03

To Frederick E. Shaw.

131.	April 12, 1897,	*Huntington avenue, Carter and Vineyard streets,*	2,685 50

To Timothy F. Lyons.

458.	Nov. 21, 1896,	*Pekin and Osborn streets, and Franklin avenue,*	3,489 40

Digitized by Google

No. of resolution.	Date of approval.		
459.	Nov. 21, 1896,	*Vale and Danforth streets,*	1,801 39
125.	April 12, 1897,	*Arlington avenue, from Olney street to Irving avenue,*	2,874 14
126.	" " "	*Atwells avenue, from Woonasquatucket river to Valley street,*	435 14
127.	" " "	*Bacon, North Main, Randall and Printery streets,*	5,053 61
128.	" " "	*Chaffee street, from Appleton to Manton avenue,*	794 51
129.	" " "	*Fillmore and Oregon streets,*	2,364 56
130.	" " "	*Henderson street, from Eddy to the river,*	6,419 21
132.	" " "	*Smith, Violet, and Ayrault streets,*	2,675 90

June 1st, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

To William H. Sherman.

No. of resolution.	Date of approval.		
180.	May 4, 1897,	*Broad street, west side, from Public to Laura,*	$553 20
193.	" 7, "	*Gallup street, from Ocean to Rugby,*	420 42
198.	" " "	*Wickenden street, from Hope street, easterly,*	191 38

To James J. Newman.

195.	May 7, 1897,	*Link street, from Bridge to South Main,*	593 51

Digitized by Google

June 9th, contracts for building the following sewers were awarded and subsequently executed, namely:

TO EGLEE AND GAMINO.

No. of resolution.	Date of approval.				
194.	May	7,	1897,	*Douglas avenue, from Whipple street to Vale,*	$1,075 64

TO JAMES J. NEWMAN.

196.	May	7,	1897,	*Manton avenue and King street,*	4,960 40
197.	"	"	"	*Prospect street, from Barnes to Halsey,*	176 90

June 11th, a contract for building the following sewer was awarded and subsequently executed, namely:

TO FREDERICK E. SHAW.

No. of resolution.	Date of approval.				
232.	June	8,	1897,	*Calder and Madison streets,*	$1,175 90

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
159.	April	17,	1896,	*Davis Park and Pleasant Valley Division, Improved Sewerage System,*	March 8, 1897.
382.	Sept.	23,	1896,	*Esten street, from Orms to Smith,*	April 28, 1897.
384.	"	"	"	*Paine street, from Cranston to Messer,*	May 6, 1897.
389.	"	"	"	*Chalkstone avenue, Lisbon street, and Regent avenue,*	April 26, 1897.

Digitized by Google

No. of resolution.	Date of approval.				Date of completion.
456.	Nov.	21,	1896,	*Irving and Broad streets,*	May 7, 1897.
485.	Dec.	4,	"	*Peace and Bucklin streets,*	June 16, 1897.
105.	April	6,	1897,	*Friendship street, at Prince street,*	April 19, 1897.
131.	"	12,	"	*Huntington avenue, Carter, and Vineyard streets,*	June 28, 1897.
132.	"	"	"	*Smith, Violet, and Ayrault streets,*	June 17, 1897.
134.	"	"	"	*Miner, Sayles, and Oxford streets, and Lexington avenue,*	May 27, 1897.
195.	May	7,	"	*Link street, from Bridge to South Main,*	June 19, 1897.

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
406.	July	15,	1889,	*Section 4, Disposal Division, Improved Sewerage System—Dredging for Condensing Water Intake.*
196.	May	7,	1897,	*Manton avenue and King street.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
459.	Nov.	21,	1896,	*Vale and Danforth streets.*
130.	April	12,	1897,	*Henderson street, from Eddy to the river.*
133.	"	"	"	*Whitmarsh, Gilmore, D, and Booth streets.*

Digitized by Google

No of resolution.	Date of approval.			
194.	May	7,	1897,	*Douglas avenue, from Whipple street to Vale.*
198.	"	"	"	*Wickenden street, from Hope, easterly.*
232.	June	8,	"	*Calder and Madison streets.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced June 30, 1897, namely:

No. of resolution.	Date of approval.			
572.	Dec.	20,	1895,	*Moshassuck River and West River Divisions, Improved Sewerage System.*
458.	Nov.	21,	1896,	*Pekin and Osborn streets, and Franklin avenue.*
125.	April	12,	1897,	*Arlington avenue, from Olney street to Irving avenue.*
126.	"	"	"	*Atwells avenue, from the Woonasquatucket river to Valley street.*
127.	"	"	"	*Bacon, North Main, Randall, and Printery streets.*
128.	"	"	"	*Chaffee street, from Appleton to Manton avenue.*
129.	"	"	"	*Fillmore and Oregon streets.*
180.	May	4,	"	*Broad street, west side, from Public to Laura.*
193.	"	7,	"	*Gallup street, from Ocean to Rugby.*
197.	"	"	"	*Prospect street, from Barnes to Halsey.*

The amount of bills approved on account of sewers from April 1 to June 30, 1897, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$39,980 79	
Improved sewerage appropriation	21,257 66	
		$61,238 45

Digitized by Google

Charged as follows:

Material	$12,201 93
Salaries of assistant engineers	3,366 27
Contract reservations	2,971 00
Additional catch-basins	980 87
Sundries, Improved Sewerage System	312 53
Testing cement	234 63
Sundries	222 91
Tools	25 54
Sewer in Calder and Madison streets	1,073 14
Sewer in Chalkstone avenue, Lisbon street and Regent avenue	3,066 75
Sewer in Douglas avenue, from Whipple street to Vale	457 17
Sewer in Esten street, from Orms to Smith	417 52
Sewer in Friendship street, from present end of sewer, about 40 feet southwesterly from Prince street	70 01
Sewer in Gallup street, from Ocean to Rugby	85
Sewer in Henderson street, from Eddy to the river	6,797 35
Sewer in Huntington avenue, Carter, and Vineyard streets	5,319 65
Sewer in Irving and Broad streets	871 81
Sewer in Link street from Bridge to South Main	657 89
Sewer in Miner, Sayles, and Oxford streets, and Lexington avenue	2,102 54
Sewer in Paine street, from Cranston to Messer	714 78
Sewer in Peace and Bucklin streets	1,736 18
Sewer in Pekin and Osborn streets, and Franklin avenue	91 93
Sewer in Smith, Violet, and Ayrault streets	2,907 55
Sewer in Vale and Danforth streets	1,713 14
Sewer in Whitmarsh, Gilmore, D, and Booth streets	1,252 60
Sewer in Wickenden street from Hope, easterly	3 05
Sewer in Elmgrove, Irving, and Wayland avenues	1 70
Sewer in Manton avenue and King street	371 77
Sewer in Pleasant Valley Division, Section 19	69 34
Brick buildings and chimney for sewage pumping station	83 20
Dredging channel for condensing water intake	106 60
Connecting lateral sewers with improved sewerage system	9,322 69
Grading grounds at Ernest street station	46 25
Holly sewage pumping engines—to erect	21 00
Pumping sewage at Ernest street station	1,169 25
Supplies for sewage pumping station	477 06
	$61,238 45

Digitized by Google

For maintenance, ... $7,246 91

Charged as follows:

Cleaning basins and sewers	$3,070 46	
Repairing basins and sewers	1,225 68	
Inspection of connections	647 13	
Tools	538 68	
Salary, superintendent	390 00	
Barn expenses	350 20	
Cleaning and repairing old drains	329 76	
Sundries	320 58	
Horses, wagons, harnesses, etc	301 21	
Office expenses	32 21	
Cleaning private connections	32 00	
Filling cisterns, etc	9 00	
	$7,246 91	

The *net* expenditure for construction of sewers to June 30, 1897, inclusive, was $5,940,485 24

The *net* expenditure for maintenance of sewers to June 30, 1897, inclusive, was 522,837 07

Bills deposited with the city treasurer for collection from April 1 to June 30, 1897, inclusive, amounted to $671 30

As follows:

Miscellaneous work	$242 33	
Cleaning private connections	79 00	
Filling cisterns, etc	2 75	
Sewer material	325 10	
Laying drains to curbstones	22 12	
	$671 30	

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $471 27

As follows:

Repairing basins for town of Johnston	$59 30	
Cleaning private connections	55 00	
Filling cisterns, etc	9 75	
Sewer material	325 10	
Laying drains to curbstones	22 12	
	$471 27	

Digitized by Google

HIGHWAYS.

April 14th, the proposal of Rhode Island Concrete Company to fill the joints of granite block paving with asphaltic cement, for the year 1897, was accepted.

June 21st, the proposal of the Narragansett Improvement Company to repave Union street, from Westminster to Washington, and Dorrance street, in front of the city hall, with Trinidad Lake asphalt, for the sum of $1.50 per square yard, was accepted.

June 30th, statements of the cost of concreting sidewalks in sundry streets, done under authority conferred by the city council by Resolution No. 446, approved Sept. 27, 1895, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, amounting to the sum of $36.77.

During the quarter the following work was completed:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 19, 1895,	*Lisbon street, from Chalkstone avenue to Regent.*
May 21, 1896,	*Beach street, from Park to Holden.*
" " "	*Blackstone street, from Eddy to Allens avenue.*
June 18, "	*Fuller street, from Wilson to Sprague.*
Sept. 17, "	*Norwich avenue, from Broad street to Baxter.*
" " "	*Chambers street, from Huntington avenue to Potters.*
" " "	*Westfield street, from Harrison to Fuller.*
" " "	*Whitney street, from Elmwood avenue to Alger.*
Oct. 15, "	*Lyman street, from Dean to Franklin.*
" " "	*Ruggles street, from Smith to Chad Brown.*
" " "	*Grand avenue, from Angell street to Oriole avenue.*
" " "	*Rhode Island avenue, from Butler to Grand.*

Digitized by Google

Date of order.	
Nov. 19, 1896,	*Ontario street, from Melrose to Hamilton.*
Dec. 17, "	*Andem street, from Academy avenue to Canton street.*
April 15, 1897,	*Brownell street, from Park to Francis.*

TO TAKE POSSESSION.

Aug. 27, 1896,	*Huntington avenue, from Chambers street to Carter.*
May 20, 1897,	*Rathbone street, from Valley to Promenade.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
543.	Dec. 17, 1895,	*Eddy street, from Henderson to Public.*

The following work was in progress June 30, 1897, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Francis street, from Cove and Exchange place to Gaspee street*—three-fourths completed.
" " "	*Promenade street, from present end of pavement near railroad bridge, to Steeple street* — one-half completed.
Oct. 15, 1896,	*Oregon street, from Fillmore to Whipple*—curbing set.
Nov 19, "	*Grand avenue, from Angell street to South Angell*—nearly completed.
April 15, 1897,	*Eddy street, from Broad to Morton and New York avenue*—one-half completed.
May 20, "	*Francis street, from West Exchange to bridge over the Woonasquatucket river* — one-half completed.

Digitized by Google

To Take Possession and Grade.

Date of order.	
June 3, 1897,	*West Park street, from Senter to Holden*—possession taken.

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street*—three-fourths completed.
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street*—one-half completed.
151.	" " "	*The two approaches to the proposed depot in Exchange place*—nearly graded.

To Grade and Put in Good Condition.

315.	July 7, 1896,	*Allens avenue, from Public street to Henderson.*

The following work, ordered by the board of aldermen and city council, had not commenced June 30, 1897, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 17, 1896,	*Osborn street, from Vale to Chalkstone avenue.*
Apr. 15, 1897,	*Milk street, from Chester avenue to Public street.*
June 3, "	*Regent avenue, from Cornell street to its easterly termination.*

To Grade and Build.

May 20, 1897,	*Calder street, at Huntington avenue.*

Digitized by Google

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Gaspee street, from Cove to the railroad bridge abutment.*

Bills approved on account of highways from April 1 to June 30, 1897, inclusive, amount to:

Regular appropriation	$51,444 97	
Special appropriation	37,676 57	
Special credit appropriation	7,465 70	
		$96,587 24

Classified as follows:

Cleaning streets	$19,072 54	
Repairs on unpaved streets	12,447 40	
Repairs on paved streets	4,600 91	
Crushed stone—material and labor	4,423 22	
Blacksmith and wheelwright shop	2,264 78	
Barn expenses	2,234 26	
Steam rollers—repairs and supplies	1,709 87	
Tools, implements, etc	907 05	
Removing snow and ice	847 17	
Labor on materials	659 62	
Salaries—superintendent and clerks	442 00	
Stone—paving and crosswalk	427 32	
Repairs on stone crushers	369 30	
Horses, wagons, harnesses, etc	180 38	
Building driveways, etc	162 88	
Watchman at city yard	156 00	
Sundries	105 07	
Watering streets	96 67	
Office expenses—city yard	35 06	
Fencing streets—material and labor	31 41	
		$51,172 91

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Andem street, from Academy avenue to Canton street	$758 65	
Beach street, from Park to Holden	815 74	
Blackstone street, from Eddy to Allens avenue	2,038 22	
Brownell street, from Park to Francis	291 93	
Chambers street, from Huntington avenue to Potters	1,265 87	
Amounts carried forward	$5,170 41	$51,172 91

Digitized by Google

Amounts brought forward	$5,170 41	$51,172 91
Eddy street, west side, from Broad to Morton, and on the east side, from Broad to New York avenue	806 45	
Fuller street, from Wilson to Sprague	198 28	
Grand avenue, from Angell street to Oriole avenue.	9 12	
Grand avenue, from Angell street to South Angell	1,103 21	
Lisbon street, from Chalkstone avenue to Regent	1,797 78	
Lyman street, from Dean to Franklin	1,049 83	
Norwich avenue, from Broad street to Baxter	121 21	
Ontario street, from Melrose to Hamilton	1,549 39	
Osborn street, from Vale to Chalkstone avenue	147 75	
Rhode Island avenue, from Butler to Grand	18 28	
Ruggles street, from Smith to Chad Brown	1,385 42	
Westfield street, from Harrison to Fuller	757 10	
Whitney street, from Elmwood avenue to Alger	1,113 26	
		15,227 49
PAVE WITH GRANITE BLOCKS.		
Francis street, from Cove and Exchange place to Gaspee street	$6,899 90	
Kinsley avenue, from Gaspee street to Harris avenue	223 32	
Promenade street, from present end of pavement near railroad bridge to Steeple street	5,001 43	
The two approaches to the proposed depot in Exchange place	11,571 42	
		23,696 07
PAVE WITH GRANITE BLOCKS AND COBBLE.		
Eddy street, from Henderson to Public		6,367 32
GRADE AND PUT IN GOOD CONDITION.		
Allens avenue, from Public street to Henderson		123 45
		$96,587 24

Bills deposited with the city treasurer for collection from April 1 to June 30, 1897, inclusive, amounted to $6,553 07

As follows:

Union Railroad Co., for granite blocks, etc.	$5,151 37	
Blacksmith and wheelwright work done for other departments	525 23	
Labor and material	319 48	
Boarding horses for other departments	286 74	
Amount carried forward	$6,282 82	

Digitized by Google

Amount brought forward	$6,282 82	
Street sweepings	184 00	
Manure from barn	72 00	
Second-hand wagon	9 00	
Discharging cargoes at city wharf	5 25	
	$6,553 07	

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $1,279 62

As follows:

Labor and material	$555 56	
Boarding horses for other departments	286 74	
Street sweepings	184 00	
Blacksmithing done for other departments	89 07	
Union Railroad Co., for granite blocks, etc.	78 00	
Manure from barn	72 00	
Second-hand wagon	9 00	
Discharging cargoes at city wharf	5 25	
		$1,279 62

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from April 1 to June 30, 1897, inclusive, amounted to $15,501 22

Charged as follows:

Granite curbing	$14,706 01
Concreting sidewalks	795 21
	$15,501 22

Bills deposited with the city treasurer for collection from April 1 to June 30, 1897, inclusive, amounted to $267 49

As follows:

Curbing	$143 36
Discharging cargoes at city wharf	124 13
	$267 49

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $5,564 77

As follows:

Curbing	$5,440 64
Discharging cargoes at city wharf	124 13
	$5,564 77

CITY ENGINEER.

Bills approved on account of the city engineer's department from April 1 to June 30, 1897, inclusive, amounted to $11,482 65

Charged as follows:

Salary—city engineer	$1,250 00
Salaries of assistants	8,753 34
Salaries of clerks	763 75
Supplies—drawing material, etc	472 46
Car fares	209 05
Instruments and repairs	17 95
Sundries	16 10
	$11,482 65

Bills deposited with the city treasurer for collection from April 1 to June 30, 1897, inclusive, (for blue process paper sold), amounted to $5 20

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $29 65

As follows:

One transit	$25 00
Blue process paper	4 65
	$29 65

Digitized by Google

BRIDGES.

April 20th, the proposal of John T. Tank to construct abutment walls and piers at the location of the present Weybosset bridge and to rebuild the river walls from Market square to the south line of Crawford street, was accepted and a contract subsequently executed. Amount, $114,573.00.

May 15th, the proposal of Boston Bridge Works for steel superstructure of the Weybosset bridge, over the Providence river, was accepted and a contract subsequently executed. Amount, $27,629.70.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894,	*New city yard, Henderson street* —to grade and fence.
158.	April 20, 1897,	*Weybosset bridge and river walls.*

Bills approved on account of bridges from April 1 to June 30, 1897, inclusive, amounted to $5,571 66

Charged as follows:

Barn expenses	$87 18
Branch avenue bridge	17 37
Branch avenue culvert	3 44
Building at city yard	3 17
Charles street bridge	13 70
Crawford street bridge	3 36
Delaine street bridge	48 33
Eagle street bridge	57 40
Exchange bridge	1 60
Experimental test for Weybosset bridge	1 65
Geneva bridge	7 65
Amount carried forward	$224 85

Digitized by Google

Amount brought forward	$224 85
Hawkins street bridge	40 45
Horses, wagons, harnesses, etc	48 27
Lumber, hardware, etc	170 08
Manton bridge	37 55
Mill street bridge	9 35
Park street bridge	16 84
Point street bridge	1,576 17
Randall street bridge	6 25
Red bridge	177 21
Rent of keeper's house—Washington bridge	30 00
Salaries—Red bridge	500 50
Salaries—Point street bridge	976 75
Salaries—Washington bridge	483 86
Smith street bridge	4 05
Smithfield avenue bridge	38 33
Stevens street bridge	8 72
Sundries	129 92
Tar bridge, Manton avenue—to rebuild	61 25
Tools	178 58
Valley street bridge—north span	86 10
Valley street bridge—south span	99 09
Veazie street bridge	21 95
Wanskuck bridge	21 65
Washington bridge	582 69
West River street bridge	7 83
Weybosset bridge	13 37
	$5,571 66

Bills approved from April 1 to June 30, 1897, inclusive, for rebuilding the Weybosset bridge and river walls, have been paid from the special appropriation for that work to the amount of $5,904 32

Bills deposited with the city treasurer for collection from April 1 to June 30, 1897, inclusive, amounted to $75 00

As follows:

Town of Johnston, painting Tar bridge	$59 25
Old lumber	15 75
	$75 00

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $70 00

As follows:

Town of Johnston—painting Tar bridge	$59 25
Old lumber	10 75
	$70 00

PUBLIC WORKS OFFICE.

Bills approved from April 1 to June 30, 1897, inclusive, for account of the public works office, amounted to $4,887 56

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,833 91
Office supplies	128 65
	$4,887 56

CONTINGENCIES.

Bills approved from April 1 to June 30, 1897, inclusive, for grading and fencing the new city yard, have been paid from the appropriation for contingencies to the amount of $811 39

ROBERT E. SMITH,

Commissioner.

Digitized by Google

Digitized by Google

FIFTY-NINTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER-ENDING SEPTEMBER 30, 1897.

THE NEW YORK
PUBLIC LIBRARY
P 72363

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
14 Custom House Street.
1897.

Digitized by Google

Digitized by Google

CITY DOCUMENT

FIFTY-NINTH

QUARTERLY REPO

OF THE

Department of Public W.

OF THE

CITY OF CHICAGO

QUARTER ENDING

CHICAGO:
PRINTED BY
CITY PRINTING
OFFICE

Digitized by Google

Digitized by Google

FIFTY-NINTH

QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1897.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1897.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72363
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1903

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., October 1, 1897.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fifty-ninth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending September 30, 1897:

WATER WORKS.

September 14th, rules were adopted regulating the use of large water supplies connected with the Providence Water Works, for fire and other purposes, and forbidding the connection of any other water supply thereto.

July 3d, the proposal of Doe & Little to furnish and deliver as required at Pettaconset Pumping Station, Georges Creek Cumberland coal for one year from date, was accepted.

July 23d, the proposal of Benjamin W. Peck & Son to paint three cottages at Pettaconset, the keeper's house at Sockanosset, and the gate houses, iron railings and posts at Sockanosset reservoir, was accepted.

September 7th, the proposal of The Congdon & Carpenter Company to furnish and deliver thirty tons "Anchor" brand pig lead for $4.38 per 100 lbs., was accepted.

Digitized by Google

The average daily consumption of water during the last quarter was 8,964,000 gallons.

Water pipes were laid during the quarter as follows:

12-INCH.

In Park avenue, in town of Cranston	298.62 feet.

8-INCH.

In Nichols street, and in Wentworth avenue	27.41 feet.

6-INCH.

In East Approach to New Depot; Booth, Calder, Caroline, Decatur, Faith, Jastram, Lawrence, Middle, Rill, Swiss and Tyler streets; Huntington, Irving and Pacific avenues; and in Commercial and Crescent streets, in town of Cranston	4,369.02 feet.
Total	4,695 05 feet.

or, .889+ miles.

Water pipes were removed during the quarter, as follows:

6-INCH.

Madison street	81.01 feet.

or, .015+ mile.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553 03 feet.
20-inch	9,626.59 feet.
16-inch,	33,810 39 feet.
12-inch	87,713.13 feet.
10-inch	15,050.47 feet.
8-inch	254,767.06 feet.
6-inch	1,112,926.81 feet.
Total	1,627,424.52 feet.

or, 308.224+ miles.

Water pipes were laid for the Special Water Service for Fire Protection, during the quarter, as follows:

Digitized by Google

24-INCH.

In Canal, and Steeple streets, and Exchange place	1,437.93 feet.

16-INCH.

In Dyer, Exchange, Eddy, Mathewson, Peck, Richmond, Ship, and Weybosset streets, and Exchange place	8,139.57 feet.

12-INCH.

In Eddy and Friendship streets	902.00 feet.
Total	10,479.50 feet.

or, 1.984+ miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

24-inch	4,188.58 feet.
16-inch	22,961.98 feet.
12-inch	2,215.76 feet.
Total	29,366.32 feet.

or, 5.561+ miles.

Eighty-nine fire hydrants have been set for the Special Service for Fire Protection, one in each of the following locations:

Aborn street, north corner of Westminster street.
Aborn street, northeast side, 179 feet southeast of Washington street.
Aborn street, east corner of Fountain street.
Aborn street, east corner of Sabin street.
Aborn street, northeast side, 37 feet southeast of Mason street.
Aborn street, northeast side, on range east line of Hicks street.
Aborn street, northeast side, 10 feet northwest of range west line of Bourn street.
Aborn street, northeast side, 37 feet northwest of Cove street.
Aborn street, southeast corner of West Exchange street.
Back street, west side, 3 feet south of range south line of Greeley lane.
Back street, west side, on range south line of Lock street.
Back street, west side, 181 feet north of Smith street.
Broad street, northwest side, 59 feet southwest of range southwest line of Chestnut street.
Broad street, northwest side, 5 feet northeast of Winslow street.
Canal street, southwest corner of Smith street.
Canal street, west side, on range south line of Church street.
Canal street, west side, 7 feet north of range south line of Cady street.
Canal street, west side, on range south line of Haymarket street.
Canal street, west side, 1 foot north of range south line of Throop street, and 26 feet out from freight house, (in present street).

Digitized by Google

Canal street, west side, 2 feet north of range north line of Steeple street, and 11 feet out from freight house, (in present street).

Charles street, west side, 41 feet south of range of south line of Stevens street.

Charles street, northwest corner of Orms street.

Dyer street, 6 feet south of south line of Exchange street.

Dyer street, 5 feet south of south line of Pine street.

Dyer street, 7 feet south of southwest corner of Hay street.

Dyer street, 30 feet north of northwest line of Clifford street.

Dyer street, 2 feet north of northeast line of Dorrance street.

Dyer street, 85 feet south of gangway, south of Dorrance street.

Dyer street, 34 feet north of north line of Ship street.

Dean street, north corner of Westminster street.

Eddy street, south corner of Washington street.

Eddy street, south corner of Pine street.

Eddy street, north corner of Friendship street.

Eddy street, north corner of Clifford street.

Eddy street, 295 feet south of south line of Clifford street.

Eddy street, north corner of Tallman street.

Eddy street, south corner of Fulton street.

Eddy street, west corner of Westminster street.

Exchange place, south corner Exchange street.

Exchange place, south corner McNeal lane.

Exchange place, east corner Arcade street.

Exchange place, on range northeast line of first gangway northeast of Dorrance street, and 119 feet northwest of southeast line of Exchange place.

Friendship street, west corner of Page street.

Jackson street, west corner of Westminster street.

Mathewson street, south corner of Westminster street.

Peck street, northwest corner of Pine street.

Peck street, 6 feet southeast of southeast line of Friendship street.

Richmond street, south corner of Pine street.

Richmond street, 8 feet south of south line of Friendship street.

Richmond street, south corner of Clifford street.

Sabin street, west corner of Mathewson street.

Sabin street, north corner of Beverly street.

Ship street, east corner of Richmond street.

Washington street, east corner of Union street.

Washington street, east corner of Mathewson street.

Washington street, southeast side, 4 feet northeast of Snow street.

Washington street, southeast side, 4 feet northeast of Walker street.

Washington street, north corner of Greene street.

Washington street, north corner of Jackson street.

Washington street, north corner of Franklin street.

Washington street, northwest side, 129 feet southwest of range southwest line of Cressey lane.

Washington street, north corner of Dean street.

Washington street, northwest side, 90 feet southwest of range east line of Howard place.

Washington street, north side, on a range east line of Oliver street.

Washington street, north side, on range east line of Lafayette street.

Digitized by Google

Washington street, northeast corner of Battey street.
West Exchange street, north side, on range northeast line of Union street extended.
West Exchange street, north side, 138 feet east of range northeast line of Mathewson street.
West Exchange street, north side on range west line of Mason street.
West Exchange street, north side, 143 feet east of range east line of Cove street and 33 feet east of angle in curb.
Westminster street, southeast side, 5 feet southwest of Graves lane.
Westminster street, south corner of Stewart street.
Westminster street, northwest side, on range northeast line of Spring street.
Westminster street, northwest side, on range northwest line of Cranston street.
Westminster street, north side, 6 feet west of Lafayette street.
Westminster street, northeast corner of Battey street.
Weybosset street, south corner of Westminster street.
Weybosset street, west side, on range north line of Post Office court.
Weybosset street, west side, on range north line of Custom House street.
Weybosset street, northwest side, on range northeast line of Hay street.
Weybosset street, west corner of Orange street.
Weybosset street, north corner of Dorrance street.
Weybosset street, west corner of Eddy street.
Weybosset street, north corner of Union street.
Weybosset street, northwest side, 5 feet southwest of Clemence street.
Weybosset street, north corner of Mathewson street.
Weybosset street, west corner of Snow street.
Weybosset street, south corner of Winslow street.
Weybosset street, east corner of Fenner street.

The total number of fire hydrants on the Special Water Service for Fire Protection is eighty-nine.

Ten fire hydrants have been set during the quarter, one in each of the following locations:

Abo street, east side, 209 feet north of Cemetery street.
Brewster street, east side, southeast corner of Sixth street.
East approach to new passenger station, 9 feet south of bridge.
Metcalf avenue, North Providence, northwest corner Cottage avenue.
Osborn street, east side, 345 feet north of Chalkstone avenue.
Pacific avenue, southwest corner of Winthrop street.
Park avenue, Cranston, north side, 479 feet east of Narragansett avenue.
River avenue, east side, about 475 feet north of Chalkstone avenue.
River avenue, North Providence, east side, 45 feet south of Lyman avenue.
River avenue, North Providence, southeast corner of Metcalf avenue.

The total number of fire hydrants is now seventeen hundred and eighty—seventeen hundred and nine flush, and seventy-one post hydrants.

Digitized by Google

During the quarter, two hundred and thirty-seven water meters were set, of which number thirteen were to replace other meters. The use of four meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,223	635	154	29	8	.....	.....	.....	4,049
Ball & Fitts, rotary	.....	.....	16	16	1	3	2	.....	38
Crown	7,224	748	226	97	26	13	15	.....	8,349
Empire	20	1	3	2	2	.....	.....	.....	28
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	2	6	4	1	13
Thomson	2,427	341	74	54	22	7	7	4	2,936
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	2	1	.....	.....	1	.....	1	.....	5
	12,924	1,726	474	198	62	29	29	5	15,447

Four plumbers' licenses were issued during the quarter, making the total number one hundred and fourteen, all of which expire December 31, 1897.

Eight hundred and sixty-eight permits to do plumbing work were issued during the quarter.

One hundred and eighty-three applications for water were made during the quarter, making the total number September 30, 1897, twenty-two thousand two hundred and sixty.

The number of new service stops opened during the quarter was one hundred and ninety-four.

The total number of service stops opened to September 30, 1897, inclusive, was twenty-one thousand five hundred and sixty-four. The number in actual use September 30, 1897, was nineteen thousand nine hundred and eighty-one.

Digitized by Google

The amount of bills approved on account of water works from July 1 to September 30, 1897, inclusive, was:

For construction and extension, . . . $37,789 49

Classified as follows:

Special water service for fire protection	$23,424 64
Laying water pipes	7,057 17
Cast iron water pipe	5,067 16
Laying service pipes	866 95
Tools	493 31
Wharf salaries	205 71
Barn expenses	174 27
Labor on and carting pipe	173 73
Special castings	146 92
Fire hydrant, boxes and covers	94 33
Horses, wagons, harnesses, etc	83 85
Stop valves	1 45
	$37,789 49

For maintenance, ... $23,024 46

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,390 14	
Sundries	600 73	
Engineers	554 20	
Firemen	434 40	
Worthington high-duty pumping engine	341 29	
Superintendence	315 43	
Real estate	226 62	
Oil, waste and packing	75 82	
Care of grounds	65 85	
Barn expenses	48 52	
Labor on fuel	44 55	
Corliss pumping engine and house	4 44	
Lights	2 20	
Cornish pumping engine	1 96	
Cornish engine house	30	
		$5,106 45
Amount carried forward		$5,106 45

Digitized by Google

Amount brought forward		$5,106 45
Sockanosset Reservoir.		
Watchman	$192 00	
Sundries	29 93	
		221 93
Hope Pumping Station.		
Sundries	$2,947 05	
Coal and wood	1,440 18	
Firemen	445 10	
Engineers	315 43	
Care of grounds	157 50	
Lights	53 76	
Holly pumping engine	22 91	
Oil, waste and packing	9 49	
		5,391 42
Hope Reservoir.		
Watchman	$216 00	
Sundries	121 75	
		337 75
Fruit Hill Reservoir.		
Sundries	$500 42	
Watchman	216 00	
		716 42
Pipe Line and Service Stops.		
Repairs	$2,868 50	
Superintendence—salaries	825 14	
		3,693 64
Meter Department.		
Water meters	$3,176 21	
Setting and repairing meters	1,347 50	
		4,523 71
Miscellaneous.		
Clerks' and inspectors' salaries	$1,334 69	
Telephone line	540 00	
Prevention of defilement of the Pawtuxet	300 00	
Inspection of wires with reference to electrolysis	230 32	
Barn expenses	209 37	
Public drinking fountains and troughs	157 48	
Analyses of water	105 00	
Sundries	87 20	
Horses, wagons, harnesses, etc	49 91	
Pipe yard, office expenses	19 17	
		3,033 14
		$23,024 46

Digitized by Google

The amount of expenditures from July 1 to September 30, 1897, inclusive, was . $60,813 95

The total expenditures to September 30, 1897, inclusive, were $8,589,775 36

The *net* expenditure for construction and extension from July 1 to September 30, 1897, inclusive, was	$36,782 55
The *net* expenditure for construction and extension to September 30, 1897, inclusive, was	$6,362,614 15
The *net* expenditure for maintenance from July 1 to September 30, 1897, inclusive, was	$16,674 18
The *net* expenditure for maintenance to September 30, 1897, inclusive, was	$1,398,482 40

The value of the water works system, as estimated by the city engineer, is as follows :

Amount estimated June 30, 1897	$3,970,882 61	
Net expenditures from June 30 to September 30, 1897.	36,782 55	
		$4,007,665 16

Bills deposited with the city treasurer for collection from July 1 to September 30, 1897, inclusive, amounted to $58,411 26

As follows :

Water	$50,949 96
Water meters	4,881 50
Setting and repairing meters	1,390 25
Rent of real estate	150 50
Examination and repairs of pipe line	83 80
Penalties	18 00
Permanently closing service stops	15 00
Labor and material, laying service pipes, etc	854 45
Spruce lumber	67 80
	$58,411 26

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $57,056 98

As follows :

Water	$49,681 76
Water meters	4,794 25
Setting and repairing meters	1,401 75
Rent of real estate	99 81
Examination and repairs of pipe line	27 30
Penalties	18 00
Permanently closing service stops	10 00
Moving lamp posts in city yard	9 45
Bolts from meter department	7 72
Labor and material, laying service pipes, etc	939 14
Spruce lumber	67 80
	$57,056 98

The amount of bills approved on account of water works for the fiscal year ending September 30, 1897, inclusive, was :

For construction and extension, . . $140,781 63

Classified as follows :

Special water service for fire protection	$86,291 41
Laying water pipes	15,922 46
Holly high-duty compound engine at Hope Station —to erect	10,197 47
Fire hydrants, boxes and covers	7,937 18
Cast iron water pipe	5,189 66
Laying service pipe	3,347 93
Babcock & Wilcox boilers at Hope Station—to erect	2,568 69
Service pipe	1,949 43
Special castings	1,492 99
Tools	1,364 56
Taps and stops	1,164 98
Barn expenses	836 58
Wharf salaries	783 21
Stop valves	618 71
Labor on and carting pipe	611 04
Horses, wagons, harnesses, etc	339 15
Barn at Fruit Hill reservoir—to build	91 67
Repairs on pipe yard buildings	43 07
Sundries	31 44
	$140,781 63

Digitized by Google

For maintenance $88,557 99

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$10,210 74	
Sundries	2,432 44	
Engineers	2,109 99	
Firemen	1,677 35	
Superintendence	1,200 93	
Corliss pumping engine and house	1,047 76	
Worthington high-duty pumping engine	605 52	
Care of grounds	374 68	
Oil, waste and packing	332 47	
Real estate	275 12	
Barn expenses	196 99	
Labor on fuel	159 70	
Cornish engine house	153 61	
Lights	28 32	
Worthington pumping engine	3 33	
Cornish pumping engine	1 96	
		$20,810 91

SOCKANOSSET RESERVOIR.

Watchman	$730 00	
Sundries	334 26	
		1,064 26

HOPE PUMPING STATION.

Sundries	$3,565 24	
Coal and wood	2,523 93	
Engineers	1,806 56	
Firemen	1,683 65	
Lights	336 63	
Care of grounds	332 25	
Hope pumping engine, No. 2	97 93	
Oil, waste and packing	45 61	
Holly pumping engine	27 41	
		10,419 21

HOPE RESERVOIR.

Watchman	$822 38	
Sundries	758 77	
		1,581 15
Amount carried forward		$33,875 53

Digitized by Google

Amount brought forward		$33,875 53
Fruit Hill Reservoir.		
Sundries	$1,758 07	
Watchman	821 25	
		2,579 32
Pipe Line and Service Stops.		
Repairs	$9,057 96	
Superintendence—salaries	3,398 09	
		12,456 05
Meter Department.		
Water meters	$17,782 18	
Setting and repairing meters	5,644 60	
		23,426 78
Miscellaneous.		
Town of Cranston, tax	$5,716 35	
Clerks' and inspectors' salaries	5,070 51	
Prevention of defilement of the Pawtuxet	1,219 21	
Barn expenses	937 98	
Horses, wagons, harnesses, etc.	808 75	
Telephone lines	540 00	
Town of North Providence, tax	400 00	
Analyses of water	375 00	
Pipe yard, office expenses	316 11	
Sundries	300 03	
Inspection of wires with reference to electrolysis	230 32	
Public drinking fountains and troughs	228 55	
Real estate at Pawtuxet	52 50	
Town of Lincoln, tax	25 00	
		16,220 31
		$88,557 99

SEWERS.

During the quarter ending September 30, 1897, four hundred and seventy-six permits were issued to drain layers — two hundred and ninety-three for new work, and one hundred and eighty-three for extension and repairs of drains.

Two drain layers' licenses were issued during the quarter, making the total number fifty-two, all of which expire December 31, 1897.

Digitized by Google

July 1st, the proposal of Booth Bros. and Hurricane Isle Granite Company to furnish and erect a flight of granite steps for the Ernest street sewage pumping station, was accepted. Amount $1,261.00.

July 26th, the offer of W. A. H. Grant to furnish vitrified sewer pipe at 79 1-8 per cent. off list price, was accepted.

July 28th, the proposal of Providence Coal Company to furnish and deliver at Ernest street Sewage Pumping Station, New River steam coal for one year from July 1, 1897, was accepted.

July 10th, a contract for the construction of the following sewer was awarded, and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

TO JAMES J. NEWMAN.

No. of resolution.	Date of approval.		
284.	July 2, 1897,	*Halsey street, from near Prospect to Brown,*	$53 90

July 14th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

TO WILLIAM H. SHERMAN.

No. of resolution.	Date of approval.		
309.	July 13, 1897,	*Power and Roger streets,*	$663 68

July 16th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

TO FREDERICK E. SHAW.

No. of resolution.	Date of approval.		
283.	July 2, 1897,	*Doyle avenue, from near East to Elmgrove,*	$1,764 60

Digitized by Google

No. of resolution.	Date of approval.		
285.	July 2, 1897,	*Irving and Humboldt avenues,*	$1,852 70
286.	" " "	*Princeton avenue, from Updike street to Elmwood avenue,*	538 20
287.	" " "	*Smith street, from Elmhurst to McCaughin,*	2,381 55

To Timothy F. Lyons.

288.	July 2, 1897,	*Wayne, Danforth and Mathew streets,*	1,288 55

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
406.	July 15, 1889,	*Section 4, Disposal Division, Improved Sewerage System—Dredging for Condensing Water Intake,*	July 26, 1897.
458.	Nov. 21, 1896,	*Pekin and Osborn streets, and Franklin avenue,*	Aug. 13, 1897.
459.	" " "	*Vale and Danforth streets,*	July 9, 1897.
125.	April 12, 1897,	*Arlington avenue, from Olney street to Irving avenue,*	Sept. 28, 1897.
129.	" " "	*Fillmore and Oregon streets,*	Sept. 15, 1897.
130.	" " "	*Henderson street, from Eddy to the river,*	July 6, 1897.
133.	" " "	*Whitmarsh, Gilmore, D, and Booth streets,*	July 2, 1897.

Digitized by Google

No. of resolution.	Date of approval.				Date of completion.
180.	May	4,	1897,	*Broad street, west side, from Public to Laura,*	July 20, 1897.
193.	"	7,	"	*Gallup street, from Ocean to Rugby,*	July 9, 1897.
194.	"	"	"	*Douglas avenue, from Whipple street to Vale,*	July 10, 1897.
198.	"	"	"	*Wickenden street, from Hope street easterly,*	July 3, 1897.
232.	June	8,	"	*Calder and Madison streets,*	July 3, 1897.
283.	July	2,	"	*Doyle avenue, from near East avenue to Elmgrove,*	Sept. 27, 1897.
285.	"	"	"	*Irving and Humboldt avenues,*	Aug. 28, 1897.
286.	"	"	"	*Princeton avenue from Updike street to Elmwood avenue,*	Aug. 3, 1897.
309.	"	13,	"	*Power and Roger streets,*	Aug. 31, 1897.

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
196.	May	7,	1897,	*Manton avenue and King street.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
127.	April	12,	1897,	*Bacon, North Main, Randall, and Printery streets.*
197.	May	7,	"	*Prospect street, from Barnes to Halsey.*
287.	July	2,	1897,	*Smith street, from Elmhurst to McCaughin.*

Digitized by Google

Work upon the following sewers, completing the work ordered by the city council, had not commenced September 30, 1897, namely:

No. of resolution.	Date of approval.			
572.	Dec.	20,	1895,	*Moshassuck River and West River Divisions, Improved Sewerage System.*
126.	April	12,	1897,	*Atwells avenue, from the Woonasquatucket river to Valley street.*
128.	"	"	"	*Chaffee street, from Appleton to Manton avenue.*
284.	July	2,	"	*Halsey street, from near Prospect to Brown.*
288.	"	"	"	*Wayne, Danforth and Mathew streets.*

The amount of bills approved on account of sewers from July 1 to September 30, 1897, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$40,245 33	
Improved sewerage appropriation	35,191 23	
		$75,436 56

Charged as follows:

Material	$4,645 56
Salaries of assistant engineers	2,678 33
Contract reservations	2,042 00
Additional catch-basins	449 38
Testing cement	290 70
Sundries, Improved Sewerage System	219 16
Sundries	166 30
Conference relating to manufacturers' waste	65 00
Tools	21 27
Sewer in Arlington avenue, from Olney street to Irving avenue	3,797 33
Sewer in Bacon, North Main, Randall and Printery streets	1,522 55
Sewer in Broad street, west side, from Public to Laura	787 66
Amount carried forward	$16,685 24

Digitized by Google

Amount brought forward	$16,685 24
Sewer in Calder and Madison streets	903 18
Sewer in Chalkstone avenue, Lisbon street and Regent avenue	283 83
Sewer in Douglas avenue, from Whipple street to Vale	912 02
Sewer in Doyle avenue, from near East to Elmgrove	2,928 57
Sewer in Fillmore and Oregon streets	3,175 98
Sewer in Gallup street, from Ocean to Rugby	635 62
Sewer in Henderson street, from Eddy to the river	1,328 92
Sewer in Huntington avenue, Carter, and Vineyard streets	2,991 15
Sewer in Irving and Humboldt avenues	2,474 17
Sewer in Link street from Bridge to South Main	159 53
Sewer in Pekin and Osborn streets, and Franklin avenue	4,789 35
Sewer in Power and Roger streets	1,186 08
Sewer in Princeton avenue, from Updike street to Elmwood avenue	841 95
Sewer in Prospect street, from Barnes to Halsey	2,217 88
Sewer in Smith street, from Elmhurst to McCaughin	3,115 47
Sewer in Vale and Danforth streets	882 62
Sewer in Whitmarsh, Gilmore, D, and Booth streets	481 13
Sewer in Wickenden street, from Hope easterly	248 21
Brick buildings and chimney for sewage pumping station	48 50
Connecting lateral sewers with improved sewerage system	4,092 08
Dredging channel for condensing water intake	2,717 39
Grading grounds at Ernest street station	363 09
Holly sewage pumping engines—to erect	12,451 86
Pumping sewage at Ernest street station	1,117 45
Supplies for sewage pumping station	1,132 44
Sewer in Manton avenue and King street	7,272 85
	$75,436 56

For maintenance, ... $12,095 50

Charged as follows:

Cleaning basins and sewers	$5,070 95
Repairing basins and sewers	2,835 75
Tools	1,097 56
Horses, wagons, harnesses, etc	775 33
Amount carried forward	$9,779 59

Digitized by Google

Amount brought forward	$9,779 59
Inspection of connections	643 48
Pumping sewage at Ernest street	415 40
Salary, superintendent	411 43
Cleaning and repairing old drains	361 69
Barn expenses	270 75
Sundries	89 32
Filling cisterns, etc	47 95
Cleaning private connections	37 50
Telephone lines	23 33
Office expenses	15 06
	$12,095 50

The *net* expenditure for construction of sewers to September 30, 1897, inclusive, was $6,015,702 32

The *net* expenditure for maintenance of sewers to September 30, 1897, inclusive, was $534,561 84

Bills deposited with the city treasurer for collection from July 1 to September 30, 1897, inclusive, amounted to $348 33

As follows:

Filling cisterns, etc	$51 39
Cleaning private connections	35 50
Cleaning well for Union Railroad Company	25 76
Sewer material	235 68
	$348 33

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $590 21

As follows:

Rebuilding manholes and chutes	$242 33
Cleaning private connections	53 00
Filling cisterns, etc	49 64
Cleaning well for Union Railroad Company	25 76
Sewer material	219 48
	$590 21

Digitized by Google

The amount of bills approved on account of sewers for the fiscal year ending September 30, 1897, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$104,552 78	
Improved sewerage appropriation	129,397 00	
		$233,949 78

Charged as follows:

Material	$30,657 85
Salaries of assistant engineers	12,383 85
Contract reservations	11,916 00
Additional catch-basins	2,992 39
Sundries, improved sewerage system	1,293 00
Testing cement	934 64
Sundries	790 28
Tools	84 04
Sewer in Arlington avenue, from Olney street to Irving avenue	3,797 33
Sewer in Bacon, North Main, Randall and Printery streets	1,522 55
Sewer in Baxter, Gladstone and Ontario streets	1,660 82
Sewer in Broad street, west side, from Public to Laura	787 66
Sewer in Burrington street and Jackson avenue	2,343 78
Sewer in Calder and Madison streets	1,976 32
Sewer in Chalkstone avenue, Lisbon street and Regent avenue	3,400 03
Sewer in Douglas avenue, from Whipple steeet to Vale	1,369 19
Sewer in Doyle avenue, from near East to Elmgrove	2,928 57
Sewer in Esten street, from Orms to Smith	417 52
Sewer in Fillmore and Oregon streets	3,175 98
Sewer in Franklin, Lyman and Dean streets	1,465 97
Sewer in Friendship street, from present end of sewer, about 40 feet southwesterly from Prince street	70 01
Sewer in Gallup street, from Ocean to Rugby	636 47
Sewer in Grove street, from Almy to Courtland	617 85
Sewer in Henderson street, from Eddy to the river.	8,126 27
Sewer in Huntington avenue, Carter and Vineyard streets	8,310 80
Sewer in Irving and Broad streets	871 81
Sewer in Irving and Humboldt avenues	2,474 17
Sewer in Link street, from Bridge to South Main	817 42
Amount carried forward	$107,822 57

Digitized by Google

Amount brought forward	$107,822 57
Sewer in Milk and Richardson streets, Prairie avenue and Broad street	983 55
Sewer in Miner, Sayles, and Oxford streets, and Lexington avenue	2,102 54
Sewer in Paine street, from Cranston to Messer	714 78
Sewer in Peace and Bucklin streets	1,736 18
Sewer in Pekin and Osborn streets and Franklin avenue	4,881 28
Sewer in Power and Roger streets	1,186 08
Sewer in Princeton avenue, from Updike street to Elmwood avenue	841 95
Sewer in Prospect street, from Barnes to Halsey	2,217 88
Sewer in Ruggles street and Chalkstone avenue	5,066 80
Sewer in Smith street, from Elmhurst to McCaughin	3,115 47
Sewer in Smith, Violet, and Ayrault streets	2,907 55
Sewer in University avenue, from Slater to Blackstone boulevard	233 10
Sewer in Vale and Danforth streets	2,630 54
Sewer in Whitmarsh, Gilmore, D, and Booth streets	1,733 73
Sewer in Wickenden street, from Hope easterly	251 26
Sewer in Disposal Division, Section 4	7,140 26
Sewer in Elmgrove, Irving, and Wayland avenues	6,256 18
Sewer in Manton avenue and King street	7,644 62
Sewer in Pleasant Valley Division, Section 19	26,000 24
Brick buildings and chimney for sewage pumping station	6,613 09
Connecting lateral sewers with improved sewerage system	13,414 77
Conference relating to manufacturers' waste	65 00
Dredging channel for condensing water intake	6,666 18
Grading grounds at Ernest street station	409 34
Holly sewage pumping engines—to erect	16,703 26
Pumping sewage at Ernest street station	2,286 70
Supplies for sewage pumping station	2,249 28
Test wells for precipitation tank	75 60
	$233,949 78

For Maintenance, ... $36,154 91

Charged as follows:

Cleaning basins and sewers	$16,348 85
Repairing basins and sewers	6,655 69
Tools	2,747 48
Inspection of connections	2,470 34
Cleaning and repairing old drains	2,031 05
Salary—superintendent	1,566 43
Amount carried forward	$31,819 84

Digitized by Google

Amount brought forward	$31,819 84
Barn expenses	1,349 14
Horses, wagons, harnesses, etc	1,318 61
Sundries	754 35
Pumping sewage at Ernest street	415 40
Cleaning private connections	228 15
Office expenses	160 54
Filling cisterns, etc	85 55
Telephone lines	23 33
	$36,154 91

HIGHWAYS.

Three permits to open streets were issued during the quarter.

August 27th, the proposal of the Narragansett Improvement Company to lay a Trinidad Lake asphalt pavement, including a binder layer, and exclusive of cement foundation, in the two approaches to the new passenger station in Exchange place, for the sum of $1.60 per square yard, was accepted, and a contract subsequently executed.

August 14th, curbing bills were certified to the assessors of taxes, amounting to $15,131.41.

During the quarter the following work was completed:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 17, 1896,	*Osborn street, from Vale to Chalkstone avenue.*
Oct. 15, "	*Oregon street, from Fillmore to Whipple.*
Nov 19, "	*Grand avenue, from Angell street to South Angell.*
April 15, 1897,	*Eddy street, from Broad to Morton and New York avenue.*
" " "	*Milk street, from Chester avenue to Public street.*
June 3, "	*Regent avenue, from Cornell street to its easterly termination.*

Digitized by Google

To Grade and Build.

Date of order.	
May 20, 1897,	*Calder street, at Huntington avenue.*
July 26, "	*Vale street, from Franklin avenue to Douglas.*

To Take Possession and Grade.

June 3, 1897, *West Park street, from Senter to Holden.*

The following was countermanded by Resolution of the City Council, No. 322, approved July 13, 1897, namely:

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*The two approaches to the proposed depot in Exchange place.*

The following work was in progress Sept. 30, 1897, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
May 16, 1895,	*Francis street, from Cove and Exchange place to Gaspee street*—three-fourths completed.
" " "	*Promenade street, from present end of pavement near railroad bridge, to Steeple street* — one-half completed.
May 20, 1897,	*Francis street, from West Exchange to bridge over the Woonasquatucket river*—one-half completed.
July 1, "	*Approaches to new passenger station*—nearly completed.

To Grade and Put in Good Condition.

Sept. 16, 1897, *Montgomery avenue, from Virginia to Maryland, and Alabama avenue, from Maryland to Montgomery.*

Digitized by Google

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street*—three-fourths completed.
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street*—one-half completed.

To Grade and Put in Good Condition.

315.	July 7, 1896,	*Allens avenue, from Public street to Henderson.*

To Pave with Trinidad Asphalt.

322.	July 13, 1897,	*Approaches to new passenger station*—two-thirds completed.

The following work, ordered by the board of aldermen and city council, had not commenced Sept. 30, 1897, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 16, 1897,	*Miner street, from Potters avenue to Sayles street.*
" " "	*Peace street, from Elmwood avenue to Bucklin street.*

To Take Possession.

Sept. 2, 1897,	*Canal street, from Smith to Mill.*

To Put in Good Condition.

Sept. 16, 1897,	*Irving avenue, from Grotto to its easterly termination.*

Digitized by Google

Bills approved on account of highways from July 1 to September 30, 1897, inclusive, amounted to:

Regular appropriation	$75,172 30	
Special appropriation	32,703 25	
Special credit appropriation	7,875 02	
		$115,750 57

Classified as follows:

Crushed stone—material and labor	$20,449 61	
Repairs on unpaved streets	19,918 53	
Cleaning streets	18,135 90	
Repairs on paved streets	4,156 90	
Barn expenses	2,212 87	
Stone—paving and crosswalk	2,069 70	
Blacksmith and wheelwright shop	1,934 45	
Repairs on stone crushers	1,335 98	
Tools, implements, etc	942 54	
Labor on materials	649 33	
Steam rollers—repairs and supplies	560 23	
Salaries—superintendent and clerks	466 29	
Sundries	248 70	
Horses, wagons, harnesses, etc	205 19	
Building driveways, etc	202 09	
Watchman at city yard	166 32	
Office expenses—city yard	160 23	
Watering streets	134 16	
Fencing streets—material and labor	63 58	
Screening gravel	45 10	
Telephone lines	23 33	
		74,081 03

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Andem street, from Academy avenue to Canton street	$213 74	
Beach street, from Park to Holden	86 54	
Blackstone street, from Eddy to Allens avenue	602 64	
Brownell street, from Park to Francis	372 62	
Chambers street, from Huntington avenue to Potters	44 80	
Amounts carried forward	$1,320 34	$74,081 03

Digitized by Google

Amounts brought forward	$1,320 34	$74,081 03
Eddy street, west side, from Broad to Morton, and on the east side, from Broad to New York avenue	5,705 37	
Grand avenue, from Angell street to Oriole avenue.	38 88	
Grand avenue, from Angell street to South Angell..	2,129 43	
Lisbon street, from Chalkstone avenue to Regent..	1,043 68	
Milk street, from Chester avenue to Public street..	1,680 50	
Oregon street, from Fillmore to Whipple	497 90	
Osborn street, from Vale to Chalkstone avenue	2,077 81	
Regent avenue, from Cornell street to its easterly termination	265 89	
Rhode Island avenue, from Butler to Grand	128 82	
Ruggles street, from Smith to Chad Brown	659 65	
Westfield street, from Harrison to Fuller	284 80	
		15,833 07
Pave with Granite Blocks.		
Francis street, from Cove and Exchange place to Gaspee street	$8,231 76	
Promenade street, from present end of pavement near railroad bridge to Steeple street	761 64	
		8,993 40
Pave with Granite Blocks and Cobble.		
Eddy street, from Henderson to Public		116 53
Pave with Trinidad Asphalt.		
The two approaches to the proposed depot in Exchange place		16,068 86
Grade and Put in Good Condition.		
Allens avenue, from Public street to Henderson	$163 10	
Montgomery avenue, from Virginia to Maryland, and *Alabama avenue*, from Maryland to Montgomery	276 08	
		439 18
To Put in Good Condition.		
Irving avenue, from Grotto to its easterly termination		218 50
		$115,750 57

Bills deposited with the city treasurer for collection from July 1 to Sept, 30, 1897, inclusive, amounted to $1,489 34

Digitized by Google

As follows:

Labor and material	$677 78	
Blacksmith and harness work done for other departments	406 71	
Boarding horses for other departments	236 85	
Street sweepings	81 00	
Manure from barn	72 00	
Discharging cargoes at city wharf	15 00	
	$1,489 34	

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $7,012 75

As follows:

Union Railroad Co., for granite blocks, etc.	$5,151 37
Blacksmith and harness work done for other departments	857 18
Labor and material	599 35
Boarding horses for other departments	236 85
Street sweepings	81 00
Manure from barn	72 00
Discharging cargoes from city wharf	15 00
	$7,012 75

Bills approved on account of highways for the fiscal year ending September 30, 1897, inclusive, amounted to:

Regular appropriation	$244,041 58	
Special appropriation	115,943 40	
Special credit appropriation	17,793 74	
		$377,778 72

Classified as follows:

Cleaning streets	$55,434 87
Repairs on unpaved streets	48,811 93
Crushed stone—material and labor	45,454 54
Repairs on paved streets	19,065 35
Removing snow and ice	12,855 40
Barn expenses	9,149 24
Blacksmith and wheelwright shop	8,898 60
Tools, implements, etc	4,835 29
Steam rollers—repairs and supplies	4,576 38
Amount carried forward	$209,081 60

Digitized by Google

Amount brought forward	$209,081 60	
Labor on material	2,853 27	
Repairs on stone crushers	2,818 82	
Stone—paving and crosswalk	2,737 00	
Salaries—superintendent and clerks	1,772 86	
Horses, wagons, harnesses, etc	1,455 21	
Reservation fund	1,306 00	
Screening gravel	1,257 58	
Building driveways, etc	1,246 52	
Watchman at city yard	627 55	
Sundries	530 41	
Office expenses—city yard	386 77	
Watering streets	230 83	
Fencing streets—material and labor	122 99	
Telephone lines	23 33	
		$226,450 74

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Althea street, from Cranston to Union avenue	$2,947 00	
Andem street, from Academy avenue to Canton street	972 39	
Beach street, from Park to Holden	902 28	
Blackstone street, from Eddy to Allens avenue	5,173 87	
Blackstone street, north side, from Plain to Culver	1,177 88	
Brownell street, from Park to Francis	664 55	
Burrington street, from Fenner avenue to Jackson	2,445 12	
Chambers street, from Huntington avenue to Potters	1,310 67	
Eddy street, west side, from Broad to Morton, and on the east side, from Broad to New York avenue	6,511 82	
Felix street, from Chalkstone avenue to Valley street	1,504 39	
Forest street, from Ivy to East avenue	50	
Fuller street, from Wilson to Sprague	1,710 13	
Globe street, from Beacon avenue to Plain street	981 80	
Grand avenue, from Angell street to Oriole avenue	827 04	
Grand avenue, from Angell street to South Angell	3,232 64	
Hawkins street, from Charles to Branch avenue	738 17	
Lillian avenue, from Broad street to Baxter	2,563 16	
Lisbon street, from Chalkstone avenue to Regent	2,841 46	
Lyman street, from Dean to Franklin	1,049 83	
Milk street, from Chester avenue to Public street	1,680 50	
Norwich avenue, from Broad street to Baxter	2,078 36	
Ontario street, from Melrose to Hamilton	1,549 39	
Oregon street, from Fillmore to Whipple	661 25	
Amounts carried forward	$43,524 20	$226,450 74

Digitized by Google

Amounts brought forward	$43,524 20	$226,450 74
Osborn street, from Vale to Chalkstone avenue	2,225 56	
Regent avenue, from Cornell street to its easterly termination	265 89	
Rhode Island avenue, from Butler to Grand	2,717 69	
River avenue, from Chalkstone to the brook on River avenue	17 89	
Ruggles street, from Smith to Chad Brown	2,045 07	
Silver Spring street, from Ashton to Branch avenue	702 99	
Van Zandt street, from Jackson avenue to Hamburg	1,044 56	
Westfield street, from Harrison to Fuller	1,041 90	
Whitney street, from Elmwood avenue to Alger	1,133 75	
		54,719 50
Pave with Granite Blocks.		
Francis street, from Cove and Exchange place to Gaspee street	$22,936 20	
Gaspee street, from Kinsley avenue to first angle east of Francis street	1,674 41	
Kinsley avenue, from Gaspee street to Harris avenue	909 67	
Promenade street, from present end of pavement near railroad bridge to Steeple street	5,881 17	
		31,401 45
Pave with Granite Blocks and Cobble.		
Eddy street, from Henderson to Public		8,936 37
Pave with Trinidad Asphalt.		
Dunwell's gangway, from Weybosset street to Dyer	$2,497 57	
Fulton street, from Eddy to Dorrance	2,064 15	
Post Office court, from Dyer street to Weybosset	2,650 58	
Snow street, from Washington to Westminster	1,909 54	
The two approaches to the proposed depot in Exchange place	27,640 28	
Union street, from Westminster to Weybosset	10 44	
Washington street, from Walker to Dorrance	18,619 47	
		55,392 03
Grade and Put in Good Condition.		
Allens avenue, from Henderson street to Public	384 05	
Montgomery avenue, from Virginia to Maryland, and *Alabama avenue*, from Maryland to Montgomery	276 08	
		660 13
To Put in Good Condition.		
Irving avenue, from Grotto to its easterly termination		218 50
		$377,778 72

Digitized by Google

SIDEWALKS AND CURBING.

Bills approved on account of sidewalks and curbing from July 1 to September 30, 1897, inclusive, for concreting sidewalks, amounted to . $1,431 54

Curbing bills deposited with the city treasurer for collection from July 1 to September 30, 1897, inclusive, amounted to $274 74

During the quarter, coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . . . $2,217 99

The expenditures on account of sidewalks and curbing for the fiscal year ending September 30, 1897, inclusive, amounted to $26,898 49

Charged as follows:

Granite curbing	$21,137 40
Concreting sidewalks	5,761 09
	$26,898 49

CITY ENGINEER.

Bills approved on account of the city engineer's department from July 1 to September 30, 1897, inclusive, amounted to $12,283 60

Charged as follows:

Salary—city engineer	$1,125 00
Salaries of assistants	9,868 38
Salaries of clerks	725 72
Car fares	300 95
Supplies—drawing material, etc	226 06
Sundries	13 77
Instruments and repairs	12 05
Telephone lines	11 67
	$12,283 60

Digitized by Google

Bills deposited with the city treasurer for collection from July 1 to September 30, 1897, inclusive, amounted to $2 80

As follows:

Calculation book	$1 60
Steel tape	1 20
	$2 80

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $3 35

As follows:

Calculation book	$1 60
Steel tape	1 20
Blue process paper	55
	$3 35

Bills approved on account of the city engineer's department for the fiscal year ending September 30, 1897, inclusive, amounted to . . . $47,999 49

Charged as follows:

Salary—city engineer	$7,875 00
Salaries of assistants	34,724 98
Salaries of clerks	2,987 60
Supplies—drawing material, etc	1,241 81
Car fares	988 15
Instruments and repairs	74 15
Sundries	63 88
Telephone lines	41 67
Meteorological instruments and repairs	2 25
	$47,999 49

Digitized by Google

BRIDGES.

September 27th, the proposal of Edward W. Everson for constructing brick arches and levelling up with Portland cement concrete for the floor of the new Weybosset bridge, was accepted and a contract subsequently executed. Amount, $8,045.00.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894,	*New city yard, Henderson street* —to grade and fence.
158.	April 20, 1897,	*Weybosset bridge and river walls.*

Bills approved on account of bridges from July 1 to September 30, 1897, inclusive, amounted to $5,793 27

Charged as follows:

Barn expenses	$70 37
Building at city yard	73
Crawford street bridge	2 33
Eagle street bridge	6 50
Geneva bridge	3 10
Hawkins street bridge	2 38
Horses, wagons, harnesses, etc	31 43
Lumber, hardware, etc	36 59
Park street bridge	1 16
Point street bridge	1,300 40
Red bridge	933 18
Rent of keeper's house, Washington bridge	30 00
Salaries—Red bridge	552 00
Salaries—Point street bridge	1,030 50
Salaries—Washington bridge	519 17
Smithfield avenue bridge	2 30
Sundries	159 67
Telephone lines	11 67
Tools	299 19
Veazie street bridge	2 30
Wanskuck bridge	5 47
Washington bridge	790 98
West River street bridge	1 85
	$5,793 27

Digitized by Google

Bills deposited with the city treasurer for collection, for old lumber sold, from July 1 to September 30, 1897, amounted to . . . $7 25

During the quarter coupons from bills collected, for old lumber sold, have been returned by the city treasurer and receipted for to the amount of $12 25

Bills approved for account of bridges for the fiscal year ending September 30, 1897, inclusive, amounted to $28,585 07

Charged as follows:

Acorn street bridge	$84 78
Atwells avenue bridge	123 89
Barn expenses	335 41
Branch avenue bridge	105 37
Branch avenue culvert	3 44
Building at city yard	26 30
Burnside bridge	283 62
Cemetery street bridge	17 80
Charles street bridge	13 70
Crawford street bridge	23 56
Delaine street bridge	48 33
Eagle street bridge	68 10
Exchange bridge—to rebuild	3,774 47
Exchange bridge—to repair	1 60
Experimental test for Weybosset bridge	73 97
Francis street bridge	261 30
Geneva bridge	13 85
Hawkins street bridge	42 83
Horses, wagons, harnesses, etc	99 09
Lumber, hardware, etc	549 07
Manton bridge	37 55
Mill street bridge	70 20
Nash lane bridge	33 53
Park street bridge	45 70
Point street bridge	4,829 75
Promenade street bridge over Moshassuck river—to build	1,432 11
Randall street bridge	25 15
Red bridge	1,401 82
Amount carried forward	$13,826 29

Digitized by Google

Amount brought forward	$13,826 29	
Rent of keeper's house—Washington bridge	120 00	
Reservation fund	231 00	
Salaries—Point street bridge	3,930 25	
Salaries—Red bridge	2,074 00	
Salaries—Washington bridge	1,958 75	
Smith street bridge	4 05	
Smithfield avenue bridge	40 63	
Stevens street bridge	8 72	
Sundries	742 12	
Tar bridge, Manton avenue—to rebuild	1,958 38	
Tar bridge, Manton avenue—to repair	4 23	
Telephone lines	11 67	
Tools	932 94	
Valley street bridge—north span	86 10	
Valley street bridge—south span	99 09	
Veazie street bridge	25 80	
Wanskuck bridge	29 44	
Washington bridge	2,029 49	
Washington row bridge—to rebuild	22 79	
West River street bridge	231 18	
Weybosset bridge	195 14	
Whelden street bridge	23 01	
	$28,585 07	

Bills approved for the construction of the new Red bridge for the fiscal year ending September 30, 1897, have been paid from the special appropriation for that work to the amount of $402 55

Bills approved for rebuilding the Weybosset bridge and river walls have been paid from the special appropriation for that work as follows:

From April 1 to June 30, 1897, inclusive	$5,904 32	
From July 1 to September 30, 1897, inclusive	24,987 56	
		$30,891 88

Digitized by Google

PUBLIC WORKS OFFICE.

Bills approved for account of the public works office from July 1 to September 30, 1897, inclusive, amounted to $5,074 47

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,972 70
Office supplies	176 77
	$5,074 47

Bills approved for account of the public works office for the fiscal year ending September 30, 1897, inclusive, amounted to $20,050 45

Charged as follows:

Salaries of commissioner and secretary	$7,700 00
Salaries of office assistants	11,628 37
Office supplies	722 08
	$20,050 45

CONTINGENCIES.

Bills approved for account of grading and fencing the new city yard for the fiscal year ending September 30, 1897, inclusive, have been paid from the appropriation for contingencies to the amount of $2,311 38

ROBERT E. SMITH,

Commissioner.

Digitized by Google

SIXTIETH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1897.

723654

Digitized by Google

Digitized by Google

SIXTIETH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1897.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1898.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72364
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1900.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., January 1, 1898.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the sixtieth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending December 31, 1897:

WATER WORKS.

December 13th, the proposal of John W. Lyon to furnish and deliver taps, stops, and plugs, was accepted. Amount, $883.80.

December 15th, the proposal of Coffin Valve Company to furnish and deliver various sizes of water gates, was accepted. Amount $2,624.00.

December 17th, the proposal of Warren Foundry and Machine Company, of Phillipsburg, N. J., to furnish and deliver about nine hundred and seventy-six tons of cast iron water pipes, was accepted and a contract subsequently executed. Amount $17,967.23.

The average daily consumption of water during the last quarter was 8,563,376 gallons, and the average daily consumption for the year 1897 was 8,635,081 gallons.

Water pipes were laid during the quarter as follows:

16-INCH.

In Chatlett street, in town of Johnston..... [illegible]

Digitized by Google

12-INCH.

In Egan street; in Chatlett street and Hartford avenue, in town of Johnston; and in Park avenue, in town of Cranston	2,608.50 feet.

8-INCH.

In Tell street; Douglas and Wealth avenues; in Dyer and Hartford avenues, in town of Johnston; and in Woodbine street, in town of Cranston	1,216.79 feet.

6-INCH.

In Dyerville road; Alton, Babbitt, Berkley, Black, Cactus, Exeter, Fisk, Ford, Ladd, Peace, Power, Sussex, Tell, Vale, Waverly and York streets; Jefferson, Mt. Pleasant, Summit, Wealth and Wisdom avenues; in Barrows, Horton, Plainfield, Pioneer and Reid streets; Alverson, Laurel Hill, Miller and Sheldon avenues, in town of Johnston; in Curtis, Irving and Smith streets, in town of Cranston	5,810.66 feet.
Total	9,910.51 feet.

or, 1.876+ miles.

Water pipes were removed during the quarter, as follows:

6-INCH.

From Chatlett street, in town of Johnston	414.63 feet.

or, .078+ mile.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	34,084.95 feet.
12-inch	90,321.63 feet.
10-inch	15,050.47 feet.
8-inch	255,983.85 feet.
6-inch	1,118,322.84 feet.
Total	1,636,920.40 feet.

or, 310.022+ miles.

Water pipes were laid for the Special Water Service for Fire Protection during the quarter, as follows:

Digitized by Google

16-INCH.

In Dyer street	42.39 feet.

or, .008+ mile.

Statement of sizes and lengths of pipe laid since the commencement of the work:

24-inch	4,188.58 feet.
16-inch	23,004.37 feet.
12-inch	2,215.76 feet.
Total	29,408.71 feet.

or, 5.569+ miles.

Seven fire hydrants have been set during the quarter, one in each of the following locations:

Alabama avenue, north side, 433 feet east of Virginia avenue.
Babcock street, north side, 220 feet west of west line of Bernard street.
Black street, east side, 80 feet north of north building line of Babbitt street.
Chatlett street, Johnston, east side, on south building line of Congdon avenue.
Horton street, Johnston, east side, 286 feet south of Harlan street.
Peace street, south side, 258 feet east of east building line of Bucklin street.
Power street, south side, southwest corner of Gano street.

The total number of fire hydrants, exclusive of hydrants for special service for fire protection, is now seventeen hundred and eighty-seven — seventeen hundred and sixteen flush, and seventy-one post hydrants.

The total number of fire hydrants on the Special Water Service for Fire Protection is eighty-nine.

During the quarter, two hundred and forty-nine water meters were set of which number ten were to replace other meters. The use of seven meters was discontinued.

The following meters were in use at the close of the quarter:

Digitized by Google

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,230	640	155	26	8	.....	.....	.....	4,059
Ball & Fitts, rotary	.....	.....	15	16	1	3	2	.....	37
Crown	7,304	753	229	101	27	15	17	.....	8,446
Empire	26	8	7	4	3	.....	.....	.....	48
Fales, Jenks & Sons	.....	....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	3	7	5	1	16
Thomson	2,516	355	75	54	22	7	7	4	3,040
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	1	1	.....	.....	1	.....	1	.....	4
	13,105	1,757	482	201	65	32	32	5	15,679

Five plumbers' licenses were issued during the quarter, making the total number one hundred and nineteen, all of which expired December 31, 1897.

Nine hundred permits to do plumbing work were issued during the quarter.

One hundred and eighty-one applications for water were made during the quarter, making the total number December 31, 1897, twenty-two thousand four hundred and forty-one.

The number of new service stops opened during the quarter was one hundred and sixty-nine.

The total number of service stops opened to December 31, 1897, inclusive, was twenty-one thousand seven hundred and thirty-three. The number in actual use December 31, 1897, was nineteen thousand nine hundred and ninety-three.

Digitized by Google

The following is a list of drinking troughs supplied with water by the Providence Water Works, viz.:

Angell street, junction South Angell.
Atwells avenue, junction of Harris.
Bassett street, off of Hospital.
Branch avenue and Abbott street.
Broad street, junction of Eddy.
Broadway junction of Westminster street.
Canal street, near Exchange place.
Canal street, near railroad crossing.
Charles street, corner Back.
Charles street and Branch avenue.
Chalkstone avenue, junction of Manton.
Chalkstone avenue, opposite Academy.
Douglas avenue and Chalkstone.
Douglas avenue and Admiral street.
Dyer street, near Crawford street bridge.
Dyer street, junction of Eddy.
Elmwood avenue and Public street.
Federal street, junction of Kenyon.
Fountain street, junction of Carpenter.
Manton avenue, junction of Atwells.
Miller avenue, (Roger Williams Park).
North Main street, junction of Benefit.
Prairie avenue, junction of Broad street.
Point street, junction of Friendship.
Point street, near the bridge.
Potters avenue, corner of Cranston street.
Randall square.
Reservoir avenue, junction of Pontiac street.
Swan Point road.
Smith street, junction of Chalkstone avenue.
South Main street, junction of Wickenden.
Thayer street, junction of Hope.
Trinity square.
Waterman street, corner of East River.
Westminster street, junction of Cranston.
West Exchange street, near Exchange place.
Weybosset street, near Mathewson.
Wickenden street, corner of Governor.

TOWN OF CRANSTON.

Cranston street, junction of Phenix road.
Park avenue, corner of Doric avenue.

TOWN OF JOHNSTON.

Hartford avenue, junction of Old Killingly road.
Manton avenue, near Killey.
Plainfield street, junction of Dyer avenue.

Digitized by Google

The following is a list of street sprinklers ready for use on the Providence Water Works, viz.:

Aborn street, near junction of Atwells avenue.
America street, near Atwells avenue.
Barton street, corner of Broadway.
Bradford street, near Broadway.
Branch avenue, near junction of North Main street.
Benefit street, foot of Angell.
Benefit street, between North Main and Halsey.
Beacon avenue, near Friendship street.
Broad street, near Gallup.
Camp street, between Cypress and Larch.
Cranston street, east side of railroad bridge.
Crary street, between Eddy and Hospital.
Codding street, near Westminster.
Dexter street, opposite Division.
Doyle avenue, near East avenue.
Doyle avenue, near North Main street.
Dike street, near Bough.
Exchange place, east end.
Exchange place, west end.
Governor street, near Waterman.
Harris avenue, near Atwells.
Hayward street, south of Somerset.
Hope street, junction of Thayer.
Hope street, corner of Wickenden.
John street, corner of Benefit.
Knight street, corner of Grove.
Manning street, near Brook.
Melrose street, near south corner of burying ground.
Moore street, corner of Broad.
North Main street, corner of Thomas.
North Main street, near Mill.
Oakland street, corner of Elmwood avenue.
Olney street, near Camp.
Orms street, near Back.
Oxford street, corner of Eddy.
Paine street, between Cranston and Messer.
Potter street, near Pine.
Power street, west of Hope.
Promenade street, west of Gaspee.
Promenade street, west of Holden.
Public street, about 200 feet east of Temple.
Reservoir avenue, opposite Atlantic.
Roger Williams Park, near Broad street, (private).
Salem street, between Potters avenue and Lilac street.
Smith street, near Oakland avenue.
Smith street, near Shaffer.
Smithfield avenue, north of Branch.

Digitized by Google

Smithfield avenue, north of the Moshassuck river.
Smithfield avenue, north of the railroad bridge.
Transit street, between South Water and South Main.
Washington street, corner of Dean.
Wayland avenue, south of Medway street.
West Friendship street, near Broad.
Weybosset street, opposite Abbott Park place.
Willow street, west of Messer.
Winter street, near Pond.

TOWN OF CRANSTON.

Cranston street, opposite Arlington avenue.

TOWN OF JOHNSTON.

Brown street, near Plainfield street.
Dyer avenue, near Plainfield street.
Laurel Hill avenue, near Plainfield street.

The following is a list of drinking fountains, namely:

Benefit street, corner of College.
Broadway, junction of Westminster street.
Canal street, corner of Steeple.
Candace street, corner of Orms.
Cranston street, junction of Westminster.
Dorrance street, near Exchange place.
Dyer street, corner of Crawford.
Jackson street, corner of Westminster.
Lockwood street, corner of Plain.
North Main street, near Mill.
Prairie avenue, opposite Willard.
Point street, corner of Eddy.
Potters avenue, corner of Elmwood.
Richmond street, corner of Weybosset.
Stevens street, (Randall square).
Ship street, corner of Dyer.
Spruce street, corner of Tefft.
Westminster street, corner of Dyer.
Wickenden street, corner of Transit.

Digitized by Google

The following table shows the lengths, sizes, etc., of services laid during twenty-one years, ending December 31, 1897:

YEARS.	Lengths of Services Laid in Feet.							Trenching.	Paving.	Taps Used.						Stops Used.						Service Boxes Used.
	Sizes of Pipe.						Totals.															
	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				⅜ in.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	⅜ in.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	
1877....	2,776.8	8,679.3	1,884.4	248.8	114.2	7.	13,710.5	14,422.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878....	2,209.8	6,881.8	1,436.6	119.4	120.7	35.3	10,803.6	11,365.38	1,659.34	133	427	91	7	13	671	148	464	91	7	12	722	725
1879....	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.40	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880....	2,163.6	5,951.2	1,150.	483 6	186.1	16.9	9,951.4	10,468.87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881....	1,078.9	6,269.4	741.1	253.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882....	.....	8,073.8	581.3	226.4	92.	32.	9,005.5	9,481.5	1,020.	....	511	49	17	15	592	....	525	41	15	14	595	610
1883....	9.	8,075.83	761.00	143.	131.9	60.	9,180.82	9,649.5	1,284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884....	.....	8,048.72	732.2	266.3	119.6	23.2	9,190.02	9,715.5	1,054.6	....	512	64	18	17	611	....	539	51	15	13	618	641
1885....	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109.5	....	490	48	11	7	556	1	519	32	5	6	563	586
1886....	23.	7,964.6	699.5	115.4	98.6	25.4	8,726.5	9,213.5	965.5	..	481	61	13	12	570	....	518	49	7	11	585	609
1887....	.....	8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,161.1	....	516	47	11	11	585	....	543	32	7	10	592	612
1888....	.....	7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5	....	495	52	9	10	566	....	519	39	5	10	573	587
1889....	.....	9,211.9	514.2	199.	90.2	8.2	10,023.5	10,563.	1,125.5	....	546	53	18	10	627	....	579	37	12	6	634	664
1890....	.....	8,997.8	671.3	194.7	241.6	61.2	10,166.6	10,792.5	1,183.	....	549	58	17	16	640	...	586	42	11	15	654	680
1891....	.....	12,531.28	965.5	237.2	311.9	53.5	14,099.38	14,816.	1,445.	....	729	88	30	24	871	....	797	66	18	22	903	944
1892....	... .	14,672.27	1,284.6	152.9	248.8	... .	16,308.57	17,177.	1,945.5	....	853	103	22	17	995	....	913	75	9	17	1,044	1,093
1893 ...	.....	11,153.2	936.5	245.7	248.6	.....	12,584.	13,214.5	1,590.	....	672	81	24	17	794	....	727	65	14	16	822	851
1894....	.....	11,285.2	756.5	391.4	129.2	15.2	13,577.5	14,129.5	1,643.	....	724	50	33	12	828	....	763	47	23	11	844	867
1895....	.....	10,258.5	954.2	142.	189.	.....	11,543.7	12,355.5	1,605.	....	635	68	9	21	733	...	668	56	6	12	742	767
1896....	.....	9,961.3	1,055.7	139.9	159.8	....	11,316.7	11,981.5	1,364.	....	579	83	14	12	688	....	617	70	12	9	708	726
1897....	.... ..	9,417.8	786.8	201.8	80 8	.... ..	10,486.7	11,007.	1,347.5	....	562	53	19	7	641	....	506	45	16	4	661	687

Digitized by Google

The following table shows the lengths, size, etc., of services laid during the year ending December 31, 1897:

Months.	Lengths of Services Laid in Feet.								Taps Used.					Stops Used.					Service boxes used.
	Sizes of Pipe.					Totals.	Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				½ in.	⅝ in.	¾ in.	1 in.	Totals.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	
January	254.6	8.2	....	....	....	262.8	274.	9	12	1	..	....	13	13	1	....	....	14	14
February	59.2	....	....	....	....	59.2	63.	6	6	....	....	....	6	6	....	....	....	6	6
March	496.1	96.6	8.2	....	....	600.9	736.5	106	39	5	1	...	45	40	5	1	....	46	46
April	1,581.5	75.6	33.4	8.2	....	1,698.7	1,750.5	256	95	4	2	1	102	96	4	2	1	103	103
May	989.8	141.6	42.6	....	....	1,174.	1,218.	148.5	61	9	3	....	73	65	9	3	....	77	78
June	873.2	71.0	8.2	20.2	....	972.6	1,001.	120.	54	7	1	2	64	57	5	1	1	64	68
July	766.3	127.2	21.2	....	....	914.7	964.5	103.5	45	8	2	....	55	52	6	1	....	59	62
August	868.8	98.8	43.4	....	....	1,011.	1,048.	101.	48	5	2	1	56	54	4	2	....	60	62
September	892.8	8.2	8.2	....	....	909.2	955.	141.	51	2	1	1	55	55	1	2	....	58	59
October	909.6	78.8	8.2	52.4	....	1,049.	1,074.5	189.5	48	7	1	2	58	49	6	1	2	58	59
November	900.8	48.6	20.2	....	....	969.6	1,014.	90.	52	3	2	....	57	54	3	2	....	59	59
December	824.6	32.2	8.2	....	....	865.	908.	77.	51	2	4	....	57	55	1	1	....	57	61
Totals	9,417.3	786.8	201.8	80.8		10,486.7	11,007.	1,347.5	562	53	19	7	641	596	45	16	4	661	687

Digitized by Google

Changes in size and location of services in 1897:

Taps and Stops.										Sizes and Lengths of Lead Pipe.										Trenching.	Paving.	Change in size only.	Change in location only.	Changes in both size and location.	Change in length.
Taken Out.					Inserted.					Taken Out.					Inserted.										
¾ inch.	⅞ inch.	⅝ inch.	¾ inch.	1 inch.	¾ inch.	⅞ inch.	⅝ inch.	¾ inch.	1 inch.	⅞ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.						
75	93	27	6	8	.....	25	11	8	2	1,245.1	1,494.2	378.7	188.5	160	531.8	102.4	161.2	18.2	.....	3,923.6	1,197.5	27	11	6	14

164 services have been removed.

Digitized by Google

The following table exhibits the number of service stops opened each month from the commencement to December 31, 1897 :

Months.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897
January	....	54	33	21	34	55	15	49	9	20	7	17	15	21	17	18	26	7	39	36	39	56	40	29	30	27	30
February	....	47	18	18	7	25	23	18	9	19	3	11	9	10	7	15	7	10	21	25	26	23	24	28	8	28	24
March	....	38	34	63	7	45	32	60	19	46	23	39	11	28	9	24	16	14	19	28	24	28	36	40	27	20	42
April	....	109	109	108	32	108	82	78	52	58	55	49	55	62	48	68	60	38	61	53	73	76	71	76	67	100	70
May	....	224	206	147	162	168	136	95	80	84	66	72	78	62	62	61	70	52	74	66	114	83	91	81	79	96	82
June	....	329	295	151	172	148	114	103	71	109	82	48	64	81	81	59	50	86	59	80	83	103	106	105	100	76	86
July	....	333	261	127	141	158	83	80	49	75	56	77	66	76	77	83	62	89	74	67	85	105	93	80	89	83	59
August	....	224	209	123	83	94	91	51	51	39	58	87	69	61	57	71	49	52	56	76	95	104	115	116	83	64	69
September	....	184	147	139	101	94	80	63	44	37	60	67	93	50	70	59	74	63	64	77	93	114	88	112	70	71	67
October	....	138	135	160	92	84	81	78	79	48	61	56	47	65	62	52	80	70	64	54	104	102	96	85	90	70	62
November	....	100	104	185	86	51	73	57	63	54	37	64	49	51	39	57	69	47	58	72	81	118	80	70	68	52	54
December	56	83	45	122	60	35	55	45	47	29	40	27	56	44	46	28	49	42	53	50	83	102	62	62	57	58	53
Totals	56	1,863	1,596	1,364	977	1,068	863	777	573	618	548	614	612	611	575	595	612	570	642	681	900	1,014	902	884	768	747	696

Digitized by Google

The receipts for water each year since the commencement have been as follows:

Year.	Amount.	Year.	Amount.
1872	$41,003 51	1885	$313,561 21
1873	97,386 09	1886	323,084 67
1874	132,052 39	1887	339,513 60
1875	165,144 71	1888	346,731 58
1876	183,868 73	1889	377,497 97
1877	200,039 39	1890	401,140 86
1878	218,883 33	1891	404,553 84
1879	229,551 78	1892	409,421 21
1880	247,705 06	1893	427,546 51
1881	260,530 87	1894	432,383 97
1882	269,318 77	1895	471,069 97
1883	283,632 89	1896	485,187 33
1884	302,368 36	1897	490,652 47

The amount of bills approved on account of water works from October 1 to December 31, 1897, inclusive, was:

For construction and extension, . . . $12,041 59

Classified as follows:

Laying water pipes	$4,900 97
Special water service for fire protection	3,145 44
Laying service pipes	863 85
Tools	642 71
Stop valves	479 40
Special castings	454 74
Cast iron water pipe	424 41
Labor on and carting pipe	289 55
Barn expenses	274 98
Wharf salaries	199 29
Holly high-duty engine at Hope station	100 00
Fire hydrants, boxes and covers	96 00
Taps and stops	79 96
Repairs on pipe yard buildings	41 32
Horses, wagons, harnesses, etc	34 37
Sundries	14 60
	$12,041 59

Digitized by Google

For maintenance, ... $26,701 96

Classified as follows:

PETTACONSET PUMPING STATION.

Sundries	$1,667 44	
Coal and wood	1,472 47	
Engineers	536 87	
Firemen	434 70	
Superintendence	305 57	
Labor on fuel	55 45	
Barn expenses	52 33	
Care of grounds	43 80	
Oil, waste and packing	39 24	
Worthington high-duty pumping engine	26 81	
Cornish engine house	12 50	
Lights	11 63	
Real estate	7 00	
Corliss pumping engine and house	2 50	
		$4,668 21

SOCKANOSSET RESERVOIR.

Watchman	$186 00	
Sundries	30 00	
		216 00

HOPE PUMPING STATION.

Firemen	$427 80	
Engineers	305 57	
Sundries	127 97	
Lights	70 98	
Care of grounds	50 75	
Oil, waste and packing	16 27	
		999 34

HOPE RESERVOIR.

Watchman		209 25

FRUIT HILL RESERVOIR.

Sundries	$332 64	
Watchman	209 25	
		541 89

PIPE LINE AND SERVICE STOPS.

Repairs	$3,[illegible] 17	
Superintendence — salaries	[illegible]	
		[illegible] 38

Amount carried forward [illegible] 07

Digitized by Google

Amount brought forward		$10,853 07

METER DEPARTMENT.

Water meters	$5,328 83	
Setting and repairing meters	1,376 03	
		6,704 86

MISCELLANEOUS.

Town of Cranston tax	$6,178 43	
Clerks' and inspectors' salaries	1,400 95	
Town of North Providence tax	400 00	
Barn expenses	330 18	
Prevention of defilement of the Pawtuxet	300 00	
Horses, wagons, harnesses, etc	185 05	
Sundries	95 92	
Analyses of water	90 00	
Real estate at Pawtuxet	65 00	
Pipe yard, office expenses	41 15	
Public drinking fountains and troughs	29 85	
Town of Lincoln tax	27 50	
		9,144 03
		$26,701 96

The amount of expenditures from October 1 to December 31, 1897, inclusive, was $38,743 55

The total expenditures to December 31, 1897, inclusive, were $8,628,518 91

The *net* expenditure for construction and extension from October 1 to December 31, 1897, inclusive, was	$8,517 97
The *net* expenditure for construction and extension to December 31, 1897, inclusive, was	$6,371,132 12
The *net* expenditure for maintenance from October 1 to December 31, 1897, inclusive, was	$18,716 22
The *net* expenditure for maintenance to December 31, 1897, inclusive, was	$1,417,198 62

The value of the water works system, as estimated by the city engineer, is as follows:

Amount estimated September 30, 1897	$4,007,665 16	
Net expenditures from October 1 to December 31, 1897	8,517 97	
		$4,016,183 31

Digitized by Google

Bills deposited with the city treasurer for collection from October 1 to December 31, 1897, inclusive, amounted to . . $62,170 46

As follows:

Water	$49,583 69
Water meters	5,663 25
Setting and repairing meters	2,178 32
Rent of real estate	93 00
Examination and repairs on pipe line	85 90
Permanently closing service stops	40 00
Penalties	20 00
Laying water pipes for Butler Hospital	2,708 60
Labor and material, laying service pipes, etc	1,025 06
Laying water pipe for N. Y., N. H. & H. R. R. Co.	766 64
Old lead	6 00
	$62,170 46

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $63,983 55

As follows:

Water	$52,456 19
Water meters	5,688 75
Setting and repairing meters	1,969 52
Rent of real estate	168 00
Examinations and repairs on pipe line	109 47
Permanently closing service stops	50 00
Penalties	18 00
Labor and material, laying service pipes, etc	3,523 62
	$63,983 55

SEWERS.

During the quarter ending December 31, 1897, four hundred and thirty-eight permits were issued to drain layers—two hundred and seventy for new work, and one hundred and sixty-eight for extension and repairs of drains.

One drain layer's license was issued during the quarter, making the total number fifty-three, all of which expired December 31, 1897.

Digitized by Google

December 8th, the proposal of the Portland Stone Ware Company of Portland, Maine, to furnish and deliver vitrified sewer pipes, branches, etc., was accepted and a contract subsequently executed. Amount, $7,231.71.

December 8th, the proposal of Merrick L. Goff to furnish and deliver catch-basin flagstones, was accepted and a contract subsequently executed. Amount, $864.00.

December 8th, the proposal of Long Island Brick Company to furnish and deliver one million sewer bricks, was accepted and a contract subsequently executed. Amount, $6,500.00.

December 14th, the proposal of Smithfield Granite Company to furnish and deliver two hundred and ten pieces inlet curbstones for catch-basins, was accepted. Amount, $1,039.50.

December 8th, the proposal of Manchester & Hudson to furnish the cement required for the department of public works during the year 1898, delivered on the work, was accepted and a contract subsequently executed.

SEWERS BUILT IN MILES, TO DECEMBER 31, 1897.

ITEMS.	KINDS.	Built Previous to 1897.	Built During 1897.	Total to Dec. 31, 1897.
Under regular appropriation.....	Brick.	31.667	1.116	32.783
Under regular appropriation.....	Pipe.	102.766	7.128	109.894
Under improved sewerage appropriaton	Brick and pipe.	21.939	.673	22.612
Total miles of sewers..		156.372	8.917	165.289

Digitized by Google

October 2d, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

TO FREDERICK E. SHAW.

No. of resolution.	Date of approval.		
386.	Oct. 1, 1897,	*Chalkstone avenue, from North Davis street to Douglas avenue,*	$965.70
387.	" " "	*Chalkstone avenue, from near Claremont street to Winthrop,*	826.20
388.	" " "	*Peace street, from west of Broad to Elmwood avenue,* .	707.20

TO WILLIAM H. SHERMAN.

385.	Oct. 1, 1897,	*Blackstone boulevard, east side, from President avenue about* 150 *feet northerly,* . .	$161.45
389.	" " "	*Waterman street, from near Wayland avenue to Butler,* .	907.17

October 26th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

TO FREDERICK E. SHAW.

No. of resolution.	Date of approval.		
572.	Dec. 20, 1895,	*Section* 20, *Moshassuck river Division, Improved Sewerage System,*	$16,778.90

October 28th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

TO WILLIAM H. SHERMAN.

No. of resolution.	Date of approval.		
417.	Oct. 26, 1897,	*South Angell street and Butler avenue,*	

Digitized by Google

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
126.	April	12,	1897,	*Atwells avenue, from the Woonasquatucket river to Valley street,*	Dec. 10, 1897.
127.	"	"	"	*Bacon, North Main Randall, and Printery streets,*	Dec. 11, 1897.
128.	"	"	"	*Chaffee street, from Appleton to Manton avenue,*	Dec. 31, 1897.
196.	May	7,	"	*Manton avenue and King street,* . .	Oct. 2, 1897.
197.	"	"	"	*Prospect street, from Barnes to Halsey,* . . .	Oct. 4, 1897.
284.	July	2,	"	*Halsey street, from near Prospect to Brown,* . . .	Oct. 18, 1897.
287.	"	"	"	*Smith street, from Elmhurst to McCaughin,* . . .	Oct. 5, 1897.
288.	"	"	"	*Wayne, Danforth, and Mathew streets,* . . .	Nov. 26, 1897.
385.	Oct.	1,	"	*Blackstone boulevard, east side, from President avenue northerly about* 150 *feet,* .	Oct. 11, 1897.
386.	"	"	"	*Chalkstone avenue, from North Davis street to Douglas avenue,*	Oct. 28, 1897.

Digitized by Google

No. of resolution.	Date of approval.				Date of completion.
387.	Oct.	1,	1897,	*Chalkstone avenue, from near Claremont street to Winthrop,*	Oct. 29, 1897.
388.	"	"	"	*Peace street, from near Broad to Elmwood avenue,*	Nov. 15, 1897.
389.	"	"	"	*Waterman street, from near Wayland avenue to Butler,*	Oct. 27, 1897.
417.	"	26,	"	*South Angell street and Butler avenue,*	Nov. 18, 1897.

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
572.	Dec.	20,	1895,	*Moshassuck River and West River Divisions, Improved Sewerage System, Section* 20.

Work upon the following sewers, completing the work ordered by the city council, had not commenced December 31, 1897, namely:

No. of resolution.	Date of approval.			
394.	Oct.	5,	1897,	*Broad and Rugby streets.*
416.	"	26,	"	*Columbian avenue and Roger Williams Park.*

Digitized by Google

SEWER MAINTENANCE DEPARTMENT.

The following table shows the work performed by the department cleaning sewers, basins, and drains, for the year 1897 :

Months.	Old Work.								New Work.									Total deposit removed, cubic yards.
	Old Drains.			Sand Catchers.		Open Ditches.			Sumps.		Sewers.				Catch-Basins.			
	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Dead ends.	No. times examined.	Number cleaned.	Deposit removed, cu. yds.	
January	....	.....	.....	....	.....	....	.....	.....	..	.....	3	2,550	395.40	.....	1	303	309.95	705.35
February	...	.....	.....	....	.....	....	.....	.....	....	.....	1	1,400	174.	.....	1	158	190.81	364.81
March	....	.....	.....	...	.....	2	150	31.95	....	.....	23	14,150	406.23	.....	2	506	511.78	949.96
April	....	.....	.....	....	.....	....	.....	.....	....	.....	10	5,800	5.63	.....	1	632	653.19	658.82
May	....	.....	.....	....	.....	....	.....	.....	....	.....	29	22,475	28.45	55	2	610	609.89	638.34
June	....	.....	.....	16	55.	...	.....	.....	....	.....	15	6,950	5.37	.....	1	760	1,029.	1,089.37
July	....	.....	.....	....	.....	....	.....	.....	2	10.	48	29,400	20.74	.....	2	1,022	887.70	918.44
August	....	.....	.....	....	.....	2	300	35.48	5	29.63	9	4,950	41.48	40	2	1,218	1,390.89	1,497.48
September	....	.....	.....	....	.....	....	.....	.....	6	57.48	21	3,650	7.40	.....	1	2,069	1,699.85	1,764.73
October	....	.....	.....	16	51.40	....	.....	.....	7	41.44	106	56,850	90.52	.....	1	1,713	1,042.	1,225.36
November	....	.....	.....	....	.....	....	.....	.....	4	26.	34	17,550	31.85	40	1	647	355.78	413.63
December	1	175	13.89	....	.....	....	.....	.....	3	53.89	78	55,575	47.30	.....	2	377	309.03	424.11
Totals	1	175	13.89	32	106.40	4	450	67.43	27	218.44	377	221,600	1,254.37	135	17	10,015	8,989.67	10,650.40

Digitized by Google

The amount of bills approved on account of sewers from October 1 to December 31, 1897, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$21,430 93	
Improved sewerage appropriation	13,331 57	
		$34,762 50

Charged as follows:

Salaries of assistant engineers	$3,466 52
Material	2,455 06
Contract reservations	931 00
Sundries	338 58
Sundries, improved sewerage system	317 48
Testing cement	220 38
Additional catch-basins	60 28
Sewer in Atwells avenue, from Woonasquatucket river to Valley street	580 56
Sewer in Bacon, North Main, Randall and Printery streets	6,288 64
Sewer in Blackstone boulevard, east side, from President avenue northerly about 150 feet	209 30
Sewer in Chaffee street, from Appleton to Manton avenue	880 31
Sewer in Chalkstone avenue from near Claremont street to Winthrop	1,110 99
Sewer in Chalkstone avenue, from North Davis street to Douglas avenue	1,356 33
Sewer in Doyle avenue, from near East to Elmgrove	153 50
Sewer in Halsey street, from near Prospect to Brown	793 16
Sewer in Peace street, from summit west of Broad to Elmwood avenue	1,074 99
Sewer in Prospect street, from Barnes to Halsey	362 85
Sewer in Smith street, from Elmhurst to McCaughin	1,230 14
Sewer in South Angell street and Butler avenue	1,407 34
Sewer in Waterman street, from near Wayland avenue to Butler	1,176 52
Sewer in Wayne, Danforth, and Mathew streets	1,485 61
Connecting lateral sewers with improved sewerage system	1,166 93
Grading grounds at Ernest street station	1,048 72
Granite steps for Ernest street station	1,265 00
Supplies for sewage pumping station	34 95
Sewer in Manton avenue and King street	137 04
Sewer in Moshassuck Division, Section 20	5,210 32
	$34,762 50

Digitized by Google

For maintenance, ... $13,981 45

Charged as follows:

Repairing basins and sewers	$4,216 59
Cleaning basins and sewers	3,916 41
Inspection of connections	507 07
Barn expenses	439 61
Cleaning and repairing old drains	433 47
Salary—superintendent	398 57
Tools	252 97
Horses, wagons, harnesses, etc	204 94
Sundries	123 17
Office expenses	49 34
Cleaning private connections	27 00
Filling cisterns, etc	25 50
ERNEST STREET STATION.	
Coal and wood	744 60
Engineers	693 49
Cleaning screens	529 07
Firemen	425 87
Supplies	422 98
Cleaning and repairing pumps	297 79
Lights	96 33
Repairs on engines	81 41
Care of grounds	43 60
Repairs on buildings	36 97
Care of buildings	14 70
	$13,981 45

The *net* expenditure for construction of sewers to December 31, 1897, inclusive, was $6,049,937 90

The *net* expenditure for maintenance of sewers to December 31, 1897, inclusive, was $548,402 69

Bills deposited with the city treasurer for collection from October 1 to December 31, 1897, inclusive, amounted to $991 94

As follows:

Repairing drains	$337 91
Cleaning private connections	71 00
Setting track grates for Union Railroad Company	68 81
Filling cisterns, etc	23 50
Sewer material	490 72
	$991 94

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for amounting to $647 52

As follows :

Cleaning private connections	$62 75
Repairing drains	49 85
Filling cisterns, etc	28 00
Sewer material	506 92
	$647 52

HIGHWAYS.

October 30th, the proposal of Murray Brothers to grade Columbian avenue, from Broad street to Roger Williams Park, for the sum of seventeen cents per cubic yard, measured in the cut, was accepted.

December 14th, the proposal of Chapman Granite Works to furnish and deliver two thousand square yards granite paving blocks, was accepted. Amount, $2,050.00.

December 14th, the proposal of Joseph Newall & Company to furnish and deliver one thousand square yards granite paving blocks, was accepted. Amount, $1,040.00.

December 14th, the proposal of Beaton Brothers to furnish and deliver one thousand square yards granite paving blocks, and one thousand linear feet crosswalk stone, was accepted. Amount, $1,340.00.

December 14th, the proposal of Smithfield Granite Company to furnish and deliver the following material, was accepted, namely :

2,000 square yards granite paving blocks ;
200 pieces circular curbing, 10 ft. radius ;
60 pieces curb corners, 2 ft. radius ;
1,000 linear feet crosswalk stone.

Amount, $3,107.00.

Digitized by Google

December 31, 1897, the total length of received streets was 209.50 miles.

141.54 miles of streets were curbed and built with gravel or broken stone.

35.99 miles of streets were paved as follows:

Granite blocks	26.99 miles.
Cobble stones	4.77 miles.
Brick	.46 miles.
Trinidad asphalt	3.25 miles.
Vulcanite	.52 miles.

In addition to the general patching necessary to maintain the streets in good repair, the following work has been done during the year ending December 31, 1897, namely:

New streets built	12,957 lineal feet.
Curbing set	25,913 lineal feet.
Streets rebuilt	6,875 lineal feet.
Streets resurfaced	181,850 lineal feet.
Streets graded	8,850 lineal feet.
Block pavement laid	17,735 square yards.
Asphalt pavement	6,940 square yards.
Cobble pavement laid	2,950 square yards.
Block paving relaid	24,787 square yards.
Brick paving relaid	836 square yards.
Concrete gutters and roadways built	8,652 square yards.
Asphalt gutters and roadways built	2,553 square yards.
Concrete sidewalks laid	4,637 square yards.
Concrete sidewalks patched and top dressed	5,111 square yards.
Crushed stone used	57,439 tons.
Screened gravel used	7,341 cubic yards.

1,009 notices to build or repair sidewalks were served upon the abutting owners during the year 1897:

The work was done, as follows:

By the abutting owners	707
By the city, at the expense of the abutting owners	62
Time for doing the work extended	24
Work not done	216

During the year the following streets, aggregating 34.441 miles, have been resurfaced, namely:

Digitized by Google

Academy avenue, from Chalkstone to Atwells.
Almy street, from Westminster to Broadway.
Andrews street, from Broadway to Grove street.
Angell street, from Cooke to Butler avenue.
Angell street, from Benefit to Prospect.
Arlington avenue, from Lloyd street to Irving avenue.
Atwells avenue, from Manton to Academy.
Bacon street, from North Main to Camp.
Barnes street, from Hope to Prospect.
Barton street, from Westminster to Broadway.
Battey street, from Westminster to Broadway.
Beacon avenue, from Broad street to Friendship.
Benevolent street, from Brown to Benefit.
Blackstone boulevard, west side, from Irving avenue to East.
Borden street, from Eddy to Plain.
Bradford street, from Broadway to Atwells avenue.
Broad street, from Trinity square to city line.
Brook street, from Power to George.
Brown street, from Angell to Olney.
Butler avenue, from Irving to Pitman street.
Calder street, from Potters avenue to Carter street.
Carter street, from Elmwood avenue to Huntington.
Cemetery street, from North Grove to North Main.
Charles Field street, from Brown to Benefit.
Chalkstone avenue, from North Davis street to Douglas avenue.
Chalkstone avenue, from Smith street to Lisbon.
Chalkstone avenue, from River to Academy.
College street, from Market square to Benefit street.
Congress avenue, from Melrose street to Broad.
Congdon street, from Angell to Jenckes.
Cope street, from Fountain to Broadway.
Creighton street, from Brown to Prospect.
D street, from Booth to Lester.
Dean street, from Westminster to Atwells avenue.
Delaine street, from Valley to Manton avenue.
Douglas avenue, from Chalkstone to Vale street.
Douglas avenue, from Branch to Geneva bridge.
Dover street, from Pemberton to Carleton.
Doyle avenue, from East to Morris.
East avenue, from Rochambeau to city line.
East River street, from Angell to Waterman.
Eaton street, from Smith to River avenue.
Eddy street, from railroad bridge to New York avenue.
Elmwood avenue, from railroad bridge to Park avenue.
Esten street, from Smith to Orms.
Federal street, from Broadway to Dean street.
Fenner street, from Broad to Westminster.
Fillmore street, from Oregon to Douglas avenue.
Franklin street, from Westminster to Fountain.
Franklin avenue, from Vale street to Chalkstone avenue.
Fountain street, from Dean to Knight.

Digitized by Google

Fruit Hill avenue, from Manton to Woonasquatucket.
Gallup street, from Prairie avenue to Rugby street.
George street, from Brown to Benefit.
Gesler street, from Courtland to Ridge.
Gilmore street, from Cranston to south of Lester.
Greene street, from Westminster to Fountain.
Grove street, from Knight to Tobey.
Halsey street, from Benefit to Brown.
Hamilton street, from Potters avenue to Adelalde.
Harold street, from Allston to Valley.
Harrison street, from Cranston to Sprague.
Henderson street, from Eddy to city dock.
Hope street, from Williams to Barnes.
Hospital street, from Eddy to Lockwood.
Knight street, from Westminster to Gesler.
Lester street, from Pearl to Harrison.
Lincoln street, from Park to Francis.
Link street, from Wickenden to South Main.
Lockwood street, from Hospital to Broad.
Madison street, from Potters avenue to Huntington.
Manton avenue, from Florence street to Fruit Hill avenue.
Meeting street, from North Main to Benefit.
Meeting street, from Congdon to Brown.
Morris avenue, from Olney street to Cypress.
North Grove street, from Cemetery to Smithfield avenue.
Ocean street, from Public to Thurbers avenue.
Oxford street, from Gordon avenue to Broad street.
Paine street, from Cranston to Messer.
Park street, from Promenade to Smith.
Peace street, from Broad to Elmwood avenue.
Pekin street, from Chalkstone avenue to Vale street.
Pitman street, from Butler avenue to Wayland.
Pond street, from Fenner to Pearl.
Prairie avenue, from Thurbers to Broad street.
Pratt street, from Olney to Halsey.
Princeton avenue, from Updike street to Elmwood avenue.
Promenade street, from Gaspee to Senter.
Prospect street, from Angell to Olney.
Regent avenue, from Harold street to Academy avenue.
Reservoir avenue, from the bridge to Elmwood avenue.
Ridge street, from Tobey to Atwells avenue.
River avenue, from Regent to Valley street.
Roanoke street, from Pemberton to Carleton.
Ruggles street, from Chalkstone avenue to Smith street.
Ring street, from Tobey to Knight.
Sabin street, from Cope to Broadway.
Sayles street, from Ocean to Miner.
Smith street, from Chalkstone avenue to city line.
Smithfield avenue, from Branch to Northup.
South Angell street, from Butler avenue to Wayland.
South Court street, from Benefit to Congdon.

Digitized by Google

Spring street, from Broad to Westminster.
Stewart court, from Westminster street to Lyman.
Summer street, from Broad to Westminster.
Thomas street, from North Main to Benefit.
Thurbers avenue, from Prairie to Hylestead street.
Tobey street, from Broadway to Ridge street.
Valley street, from Zone to Hemlock.
Valley street, from Broadway to Atwells avenue.
Vineyard street, from Carter to Hawthorne.
Vinton street, from Fountain to Atwells avenue.
Violet street, from Orms to Chalkstone avenue.
Washington street, from Walker to Knight.
Waterman street, from Butler avenue to Wayland.
Waterman street, from North Main to Prospect.
Wayland avenue, from Pitman street to Angell.
Winter street, from Broad to Westminster.
Winslow street, from Broad to Weybosset.
Woodward road, from Branch avenue to Veazie street.
Woonasquatucket avenue, from Fruit Hill to city line.

1.676 + miles of streets have been graded during the year, namely:

Alabama avenue, from Maryland to Montgomery.
Allens avenue, from Public street to Henderson.
Arlington avenue, from Irving to Olney street.
Blackstone street, from Eddy to Allens avenue.
Henderson street, from Allens avenue to city dock.
Huntington avenue, from Carter street to Calder.
Montgomery avenue, from Virginia to Maryland.
Park avenue, south of Roger Williams Park.
West Park street, from Holden to Calais.

2.618 + miles of streets have been repaved during the year, namely:

Delahunt street, from Branch avenue to Henrietta street.
Eddy street, from Washington to Fountain.
Eddy street, from Public to Thurbers avenue.
Fountain street, from West Exchange to Mathewson.
Randall street, from Printery to North Main.
South Main street, from Market square to Transit street.
South Water street, from Cent to India.
Westminster street, from Cranston to Barton.
West River street, from Charles to Wilcox.
Wickenden street, from Hope to East.

Received Streets Not Built January 1, 1898.

First Ward.

Pitman street, from Butler avenue to East River street.
Waterman street, from Bellevue to East River.

Digitized by Google

East River street, from Pitman to South Angell.
Prospect alley, from Hope street to Brook.

SECOND WARD.

Lloyd street, from near Whittier avenue to Arlington.
Lloyd street, from Slater avenue to Blackstone boulevard.
President avenue, from Slater to Blackstone boulevard.
Slater avenue, from Irving to President.
Elmgrove avenue, from Irving to Cypress street.
Hidden street, from Prospect to Congdon.
Olney street, from Hope to Arlington avenue.
Pleasant street, from Ivy to East avenue.
Doyle avenue, from Morris to Elmgrove.
Cypress street, from Morris avenue to Cole.
Grand View street, from North Main to Knowles.
Cole avenue, from Cypress street to Rochambeau avenue.
East avenue, from Doyle to city line.
Angell street, from Grand avenue easterly.
Irving avenue, from Grotto easterly.
University avenue, from Slater to Blackstone boulevard.
Humboldt avenue, from Irving to Elton street.
Morris avenue, from Olney street to Cypress.
Rochambeau avenue, from Blackstone boulevard to city line.
Blackstone boulevard, from Rochambeau avenue to city line.
Seventh street, from North Main to Summit avenue.
Summit avenue, from Fourth street to Seventh.
Stampers street, from North Main to Hewes.
Back street, from near Mill to Stevens.
Burrs Lane, from North Main street easterly.
Cemetery street, from North Main street to the river.
Frost street, from North Main to Cemetery.
Matilda street, from North Main to Concord.
Concord street, from Matilda to Bentley lane.

THIRD WARD.

Black street, from Orms to Chalkstone avenue.
Admiral street, from Douglas avenue to city line.
Douglas avenue, from near the cemetery to Admiral street.
Douglas avenue, from Branch to city line.
Veazie street, from Douglas avenue to Douglas.
Hawkins street, from Douglas avenue to Branch.
Veazie street, from Branch avenue to Woodward road.
Woodward road, from Branch avenue to city line.
Luna street, from Branch avenue to Northup.
Northup avenue, from Luna street to Smithfield avenue.
North Grove street, from Smithfield avenue to Cemetery street.
Cemetery street, from the river to Smithfield avenue.
Smithfield avenue, from Branch to city line.
Hall street, from Northup avenue to Ledge street.
Opper street, from Branch avenue to Nahant street.

Digitized by Google

Commodore street, from Silver Spring to Branch avenue.
O'Neil street, from Veazie to Douglas avenue.
Hazard street, from Douglas avenue southerly.
River avenue, from Admiral street to Douglas avenue.
Liberty street, from Smith to Jefferson.
Canal street, from Smith to Mill.
Charles street, from Mill to Randall square.
Charles street, from Hagan to city line.

Fourth Ward.

Mason street, from Aborn to West Exchange.
Callender street, from Sabin to Mason.
Beverly street, from Sabin to Mason.
Worcester street, from Eddy to Clemence.

Fifth Ward.

Allens avenue, from Blackstone street northerly.
Ship street, from Dyer to the river.
Elm street, from Providence river westerly.
Henderson street, from Allens avenue easterly.

Sixth Ward.

Reynolds avenue, from Prairie to Burnside street.
Public street, from Allens avenue to harbor line.
Briggs street, from Plain to Eddy.
Thurbers avenue, from Kay street to harbor line.
Kay street, from Thurbers avenue to the railroad.
Richardson street, from Prairie avenue to Eddy street.
Long Cove street, from Eddy easterly.
Jillson street, from Broad to Eddy.
Ernest street, from Eddy to Allens avenue.
Ocean street, from Thurbers avenue to Byfield street.
Rachel street, from Autumn to Thurbers avenue.
Rugby street, from Jillson to Broad.
Lavina street, from Logan avenue to Cole street.
Gordon avenue, from Gallup street to Colfax.
Early street, from Broad to Prairie avenue.
Allens avenue, from Public street to New York avenue.

Seventh Ward.

Bucklin street, from Burnett to Cromwell.
Columbia avenue, from Broad street to Roger Williams Park.
Irving street, from Broad to Emerson.
Lenox avenue, from Hamilton street to Emerson.
Lexington avenue, from Hamilton street to Broad.
Ontario street, from Hamilton to Broad.
Adelaide avenue, from Elmwood to Crescent street.
Reservoir avenue, from railroad bridge to city line.
Elmwood street, from Reservoir avenue to Holmes street.

Digitized by Google

Melrose street, from Irving to Roger Williams avenue.
Hamilton street, from Adelaide avenue to Sackett street.
Pontiac street, from Reservoir avenue to city line.
Fenner avenue, from Cranston street to Reservoir avenue.
Jordan street, from Howe to Reservoir avenue.
Atlantic avenue, from Elmwood to Reservoir.
Huntington avenue, from Jackson to Carter street.
Pearce avenue, from Huntington to Anthony.
Waldo street, from Salem to Dexter.

Eighth Ward.

Wadsworth street, from Sorrento to Cranston.
Anthony avenue, from Cranston street westerly.
Avon street, from Anthony avenue northerly.
Rice street, from Pearl to A.
Perkins street, from Pearl to A.
Saunders street, from Lester to Perkins.
Oak street, from Troy to Huntington avenue.
Troy street, from Oak to Westminster.

Ninth Ward.

Dean street, from Cedar to West Exchange.
McAvoy street, from Spruce to West Exchange.
Lily street, from Spruce to Atwells avenue.
Tefft street, from West Exchange to Atwells avenue.
Eden street, from Bell to Grove.

Tenth Ward.

West Park street, from Holden to Senter.
West Park street, from Valley easterly.
Jewett street, from Valley to angle in street.
Okie street, east and west of Bath.
Calais street, from Jewett to Edith.
Senter street, from West Park to Promenade.
Bath street, from Orms to Senter.
Rathbone street, from Valley to Promenade.
Ayrault street, from Valley to Chalkstone avenue.
Promenade street, from near Holden to Hemlock.
Vale street, from Douglas avenue to Danforth street.
Danforth street, from Vale to Smith.
Eaton street, from Douglas avenue to Smith street.
Smith street, from Oakland avenue to city line.
Old road, from Smith street to Smith.
River avenue, from the brook to Eaton street.
Elmhurst street, from Smith to Eaton.
Academy avenue, from Chalkstone to Smith.
Chalkstone avenue, from Mount Pleasant to Manton.
Manton avenue, from Atwells to Fruit Hill.
Fruit Hill avenue, from Manton to city line.

Digitized by Google

Woonasquatucket avenue, from Fruit Hill to city line.
King street, from Manton avenue to Sheridan street.
Andem street, from Canton to Bergen.
Pemberton street, from Beaufort to Dover.
Franklin avenue, from Vale street to Eaton.
Yale avenue, from Mt. Pleasant to Carleton street.

During the quarter the following work was completed:

To Grade and Put in Good Condition.

Date of order.	
Sept. 16, 1897,	*Montgomery avenue, from Virginia to Maryland, and Alabama avenue, from Maryland to Montgomery.*

To Take Possession.

Sept. 2, 1897,	*Canal street, from Smith to Mill.*

To Grade and Put in Good Condition.

No. of resolution.	Date of approval.	
315.	July 7, 1896,	*Allens avenue, from Public street to Henderson.*

The following work was in progress Dec. 31, 1897, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
May 16, 1895,	*Francis street, from Cove and Exchange place to Gaspee street:* — three-fourths completed.
" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.
May 20, 1897,	*Francis street, from West Exchange to bridge over the Woonasquatucket river:* — one-half completed.
July 1, "	*Approaches to new passenger station:* — nearly completed.

Digitized by Google

Date of order.	
Sept. 16, 1897,	*Miner street, from Potters avenue to Sayles street:* — gutters to be concreted.
Oct. 21, 1897,	*Irving avenue, from Taber to Blackstone boulevard:* — gutters to be concreted.

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street:* — three-fourths completed.
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.

TO PAVE WITH TRINIDAD ASPHALT.

322.	July 13, 1897,	*Approaches to new passenger station:* — two-thirds completed.

The following work, ordered by the board of aldermen and city council, had not commenced Dec. 31, 1897, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Sept. 16, 1897,	*Peace street, from Elmwood avenue to Bucklin street.*
Oct. 21, 1897,	*Roger street, from Power to Williams.*
" " "	*Power street, from Ives to Gano.*
Nov. 18, "	*Whitmarsh street, from Updike to Elmwood avenue.*
Dec. 16, "	*Arlington avenue, east side, from Irving to University.*
" " "	*Ayrault street, from Valley to Chalkstone avenue.*
" " "	*Black street, from Orms to Chalkstone avenue.*
" " "	*Foster street, from Broad to Pine.*

Digitized by Google

Date of order.	
Dec. 16, 1897,	*Lexington avenue, from Hamilton street to Broad.*
" " "	*Wayne street, from Nolan to Candace.*
" " "	*West Park street, from Holden to Senter.*

TO PUT IN GOOD CONDITION.

Sept. 16, 1897, *Irving avenue, from Grotto to its easterly termination.*

Bills approved on account of highways from October 1 to December 31, 1897, inclusive, amounted to:

Regular appropriation	$77,748 41	
Special appropriation	321 34	
Special credit appropriation	6,413 11	
		$84,482 86

Classified as follows:

Crushed stone—material and labor	$29,458 93	
Repairs on unpaved streets	14,937 12	
Cleaning streets	14,187 65	
Repairs on paved streets	2,587 02	
Barn expenses	2,567 19	
Blacksmith and wheelwright shop	2,446 44	
Tools, implements, etc	1,029 00	
Stone—paving and crosswalk	996 88	
Labor on material	844 73	
Steam rollers—repairs and supplies	770 24	
Horses, wagons, harnesses, etc	622 42	
Salaries—superintendent and clerks	451 71	
Building driveways, etc	410 76	
Repairs on stone crushers	299 33	
Sundries	177 91	
Watchman at city yard	159 43	
Fencing streets—material and labor	56 54	
Office expenses—city yard	47 24	
Watering streets	35 00	
		$72,085 54
Amount carried forward		$72,085 54

Digitized by Google

Amount brought forward.....		$72,085 54

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Andem street, from Academy avenue to Canton street.....	$10 00	
Brownell street, from Park to Francis.....	37 97	
Eddy street, west side, from Broad to Morton, and on the east side, from Broad to New York avenue.....	1 14	
Irving avenue, from Taber to Blackstone boulevard	6,420 33	
Lisbon street, from Chalkstone avenue to Regent..	59 71	
Milk street, from Chester avenue to Public street..	24 54	
Miner street, from Potters avenue to Sayles street..	1,047 55	
Osborn street, from Vale to Chalkstone avenue....	67 48	
		7,668 72

Pave with Granite Blocks and Cobble.

Eddy street, from Henderson to Public.....		12 90

Pave with Trinidad Asphalt.

The two approaches to the proposed depot in Exchange place.....		184 15

Grade and Put in Good Condition.

Allens avenue, from Public street to Henderson....	$333 34	
Montgomery avenue, from Virginia to Maryland, and *Alabama avenue*, from Maryland to Montgomery.....	2,985 83	
		3,319 17

To Put in Good Condition.

Irving avenue, from Grotto to its easterly termination.....		330 85

Take Possession.

Canal street, from Smith to Mill.....		881 53
		$84,482 86

Bills deposited with the city treasurer for collection from October 1 to December 31, 1897, inclusive, amounted to $5,574 54

Digitized by Google

As follows:

Labor and material	$3,707 98
New York, New Haven and Hartford Railroad Company, for granite curbing, etc	1,041 20
Blacksmith and harness work done for other departments	368 36
Boarding horses for other departments	209 24
Street sweepings	147 00
Manure from barn	72 00
Removing trees	18 76
Stone drag	10 00
	$5,574 54

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $4,005 09

As follows:

Labor and material	$2,435 78
New York, New Haven and Hartford Railroad Company, for granite curbing, etc	1,041 20
Boarding horses for other departments	209 24
Street sweepings	147 00
Manure from barn	72 00
Blacksmith and harness work for other departments	71 11
Removing trees	18 76
Stone drag	10 00
	$4,005 09

SIDEWALKS AND CURBING.

Bills approved on account of sidewalks and curbing from October 1 to December 31, 1897, inclusive, amounted to $3,469 92

Charged as follows:

Concreting sidewalks	$3,219 52
Granite curbing	250 40
	$3,469 92

Digitized by Google

Curbing bills deposited with the city treasurer for collection, from October 1 to December 31, 1897, inclusive, amounted to $812 83

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $860 35

As follows:

Granite curbing	$854 35	
Concreting sidewalks	6 00	
	$860 35	

CITY ENGINEER.

Bills approved on account of the city engineer's department, from October 1 to December 31, 1897, inclusive, amounted to . . $11,128 67

Charged as follows:

Salary—city engineer	$1,125 00	
Salaries of assistants	8,625 19	
Salaries of clerks	780 53	
Car fares	317 30	
Supplies—drawing material, etc	239 07	
Sundries	20 33	
Instruments and repairs	18 75	
Meteorological instruments and repairs	2 50	
	$11,128 67	

BRIDGES.

November 17th, the proposal of Narragansett Improvement Company to lay a Trinidad Lake asphalt pavement on Weybosset bridge, was accepted and a contract subsequently executed. Amount, $5,357.50.

During the quarter, the following work was completed, namely:

Digitized by Google

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894,	*New city yard, Henderson street* —to grade and fence.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
158.	April 20, 1897,	*Weybosset bridge and river walls.*
446.	Nov. 19, 1897,	*Weybosset bridge extension.*

Bills approved on account of bridges from October 1 to December 31, 1897, inclusive, amounted to $4,204 93

Charged as follows:

Acorn street bridge	$12 49
Atwells avenue bridge	1 57
Barn expenses	110 00
Branch avenue bridge	13 45
Building at city yard	10 93
Burnside bridge	2 15
Eagle street bridge	1 88
Gaspee street bridge	33 70
Geneva bridge	1 88
Horses, wagons, harnesses, etc	22 63
Lumber, hardware, etc	22 14
Mill street bridge	3 15
Point street bridge	1,222 57
Randall street bridge	15 35
Red bridge	109 02
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	999 75
Salaries—Red bridge	521 00
Salaries—Washington bridge	507 65
Sundries	138 83
Tools	119 73
Veazie street bridge	1 87
Wanskuck bridge	3 75
Washington bridge	277 02
Whelden street bridge	22 42
	$4,204 93

Digitized by Google

Bills deposited with the city treasurer for collection from October 1 to December 31, 1897, inclusive (for labor performed for the Union Railroad Company), amounted to . . . $706 75

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, (for labor performed for the Union Railroad Company), to the amount of . $706 75

Bills approved for account of rebuilding the Weybosset bridge and river walls, from October 1 to December 31, 1897, inclusive, have been paid from the special appropriation for that work, to the amount of $41,801 38

PUBLIC WORKS OFFICE.

Bills approved for account of the public works office, from October 1 to December 31, 1897, inclusive, amounted to $5,091 59

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	3,065 79
Office supplies	100 80
	$5,091 59

CONTINGENCIES.

Bills approved for account of grading and fencing the new city yard, from October 1 to December 31, 1897, inclusive, have been paid from the appropriation for contingencies to the amount of $840 87

ROBERT E. SMITH,

Commissioner.

Digitized by Google

1898.] CITY DOCUMENT. [No. 29.

SIXTY-FIRST QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1898.

72365

The Providence Press:
Snow & Farnham, City Printers,
15 Custom House Street.
1898.

Digitized by Google

Digitized by Google

SIXTY-FIRST QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1898.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1898.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72365
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1900.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., April 1, 1898.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the sixty-first quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending March 31, 1898:

WATER WORKS.

January 8th, the proposal of The Pomroy Coal Company to furnish the teams required for teaming at the city pipe yard during the year 1898, was accepted.

January 8th, the proposal of Builder's Iron Foundry to furnish special castings for the Water and Sewer Departments for the year 1898, was accepted and a contract subsequently executed.

January 31st, the proposal of Coffin Valve Company, of Neponset, Mass., to furnish and deliver twenty-five hydrants, boxes, and covers, was accepted. Amount, $2,340.

March 18th, the proposal of Chapman Valve Company to furnish and deliver six 6-inch post hydrants, was accepted.

The average daily consumption of water during the last quarter was 8,766,172 gallons.

Digitized by Google

Water pipes were laid during the quarter as follows:

6-INCH.

In Forest and Wayne streets; Arlington, Elmgrove, and Lexington avenues...	1,280.54 feet.

or, .242+ mile.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	34,084 95 feet.
12-inch	90,321.63 feet.
10-inch	15,050.47 feet.
8-inch	255,983.85 feet.
6-inch	1,119,603.38 feet.
Total	1,638,200.94 feet.

or, 310.265+ miles.

Statement of sizes and lengths of pipe laid for the Special Water Service for Fire Protection, since the commencement of the work:

24-inch	4,188.58 feet.
16-inch	23,004.37 feet.
12-inch	2,215.76 feet.
Total	29,408.71 feet.

or, 5.569+ miles.

Three fire hydrants have been set during the quarter, one in each of the following locations:

Arlington avenue, east side, 31.5 feet north of north building line of Irving avenue.

Forest street, north side, on east building line of East avenue.

Laurel Hill avenue, Cranston, east side, 100 feet south of south line of Linwood avenue.

The total number of fire hydrants, exclusive of hydrants for special service for fire protection, is now seventeen hundred and ninety—seventeen hundred and eighteen flush, and seventy-two post hydrants.

Digitized by Google

The total number of fire hydrants on the Special Water Service for Fire Protection is eighty-nine.

During the quarter, two hundred and thirty-three water meters were set, of which number forty were to replace other meters. The use of one meter was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,209	636	153	25	7	.....	.....	.....	4,030
Ball & Fitts, rotary	.....	.....	14	16	1	3	2	.....	36
Crown	7,394	758	233	102	28	15	17	.....	8,547
Empire	50	9	8	6	3	.....	.....	.....	76
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	3	9	7	1	20
Thomson	2,595	364	76	54	22	7	7	4	3,129
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	1	1	.....	.....	1	.....	1	.....	4
	13,277	1,768	485	203	65	34	34	5	15,871

One hundred and eight plumbers' licenses were issued during the quarter, all of which expire December 31, 1898.

Five hundred and eighty-eight permits to do plumbing work were issued during the quarter.

Seventy-eight applications for water were made during the quarter, making the total number March 31, 1898, twenty-two thousand five hundred and nineteen.

The number of new service stops opened during the quarter was one hundred and seven.

The total number of service stops opened to March 31, 1898, inclusive, was twenty-one thousand eight hundred and

Digitized by Google

forty. The number in actual use March 31, 1898, was twenty thousand and forty-two.

The amount of bills approved on account of water works from January 1 to March 31, 1898, inclusive, was:

For construction and extension, . . . $24,525 55

Classified as follows:

Cast iron water pipe	$13,768 13	
Stop valves	2,649 65	
Fire hydrants, boxes, and covers	2,377 28	
Service pipe	1,587 81	
Laying service pipes	748 02	
Laying water pipes	681 47	
Special castings	544 17	
Patterns for special castings	534 50	
Taps and stops	466 90	
Tools	442 99	
Labor on and carting pipe	268 67	
Barn expenses	227 93	
Wharf salaries	195 00	
Horses, wagons, harnesses, etc	31 93	
Repairs on pipe yard buildings	1 10	
		$24,525 55

For maintenance, ... $18,145 72

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$1,583 52	
Sundries	1,460 45	
Engineers	525 33	
Firemen	415 70	
Superintendence	299 00	
Care of grounds	198 25	
Oil, waste and packing	90 36	
Labor on fuel	49 95	
Barn expenses	45 38	
Worthington high-duty pumping engine	14 72	
Lights	1 05	
		$4,683 71
Amount carried forward		$4,683 71

Digitized by Google

Amount brought forward		$4,683 71
Sockanosset Reservoir.		
Watchman	$182 00	
Sundries	102 50	
		284 50
Hope Pumping Station.		
Coal and wood	$712 50	
Firemen	418 60	
Engineers	299 00	
Repairs on boilers	173 87	
Lights	78 75	
Holly pumping engine	73 82	
Sundries	37 54	
		1,794 08
Hope Reservoir.		
Sundries	$262 60	
Watchman	204 75	
		467 35
Fruit Hill Reservoir.		
Sundries	$341 53	
Watchman	204 75	
		546 28
Pipe Line and Service Stops.		
Repairs	$3,159 80	
Superintendence — salaries	840 35	
		4,000 15
Meter Department.		
Water meters	$2,365 96	
Setting and repairing meters	1,403 05	
		3,769 01
Miscellaneous.		
Clerks' and inspectors' salaries	$1,421 16	
Prevention of defilement of the Pawtuxet	466 66	
Barn expenses	273 79	
Horses, wagons, harnesses, etc	204 94	
Pipe yard, office expenses	93 59	
Analyses of water	90 00	
Sundries	50 50	
		2,600 64
		$18,145 72

The amount of expenditures from January 1 to March 31, 1898, inclusive, was $42,671 27

Digitized by Google

The total expenditures to March 31, 1898, inclusive, were $8,671,190 18

The *net* expenditure for construction and extension from January 1 to March 31, 1898, inclusive, was	$22,544 83
The *net* expenditure for construction and extension to March 31, 1898, inclusive, was	$6,393,676 95
The *net* expenditure for maintenance from January 1 to March 31, 1898, inclusive, was	$12,626 87
The *net* expenditure for maintenance to March 31, 1898, inclusive, was	$1,429,825 49

The value of the water works system January 1, 1898, as estimated by the city engineer, was as follows :

Pettaconset pumping station	$340,694 00	
Hope pumping station	143,784 15	
Sockanosset, Hope, and Fruit Hill reservoirs	751,629 00	
Main lines and distribution pipes	2,764,100 98	
Real estate in Pawtuxet and Lincoln	15,975 00	
Tools and supplies	31,866 70	
		$4,048,049 83

Bills deposited with the city treasurer for collection from January 1 to March 31, 1898, inclusive, amounted to . . $370,097 50

As follows :

Water	$363,614 46
Water meters	3,638 50
Setting and repairing meters	1,324 30
Rent of real estate	225 50
Penalties	192 00
Permanently closing service stops	40 00
Labor and material, laying service pipes, etc	743 20
Lead dross	205 61
Old brass	113 93
	$370,097 50

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $320,089 10

Digitized by Google

As follows:

Water	$312,397 53
Water meters	3,714 50
Setting and repairing meters	1,572 70
Penalties	192 00
Rent of real estate	150 50
Examinations and repairs on pipe line	41 15
Permanently closing service stops	40 00
Labor and material, laying service pipes, etc	1,661 18
Lead dross	205 61
Old brass	113 93
	$320,089 10

SEWERS.

During the quarter ending March 31, 1898, two hundred and twenty-four permits were issued to drain layers — one hundred and nineteen for new work, and one hundred and five for extension and repairs of drains.

Forty-two drain layers' licenses were issued during the quarter, all of which expire December 31, 1898.

February 9th, the sewer in Garden street, from Jackson street 140 feet westerly, was purchased of Eliza T. Paine, in accordance with Joint Resolution of the City Council, No. 55, approved February 4, 1898. Amount, $359.92.

During the quarter, assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Chalkstone avenue, Section 19, Improved Sewerage System	$2,456 79
South Water street, Sections 17 and 18, Improved Sewerage System	8,279 29
Friendship street	83 41
Ruggles street and Chalkstone avenue	9,058 58
Esten street	929 93
Irving and Broad streets	2,368 05
Paine street	1,431 16
Chalkstone avenue, Lisbon street, and Regent avenue	9,130 13
Total	$33,737 34

Digitized by Google

March 24th, a contract was awarded and subsequently executed, as follows:

[The amount given below is what is estimated will be paid the contractor for labor, and does not include the cost of inspection and materials, or rock excavation.]

TO EDWARD W. EVERSON.

No. of resolution.	Date of approval.	
406.	July 15, 1889,	*Section 2, Sewage Precipitation Tanks, Improved Sewerage System*, $78,135 00.

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
572.	Dec. 20, 1895,	*Moshassuck River and West River Divisions, Improved Sewerage System, Section* 20.

Work upon the following sewers, completing the work ordered by the city council, had not commenced March 31, 1898, namely:

No. of resolution.	Date of approval.	
406.	July 15, 1889,	*Section 2, Sewage Precipitation Tanks, Improved Sewerage System.*
394.	Oct. 5, 1897,	*Broad and Rugby streets.*
416.	" 26, "	*Columbian avenue and Roger Williams Park.*

The amount of bills approved on account of sewers from January 1 to March 31, 1898, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$5,254 02	
Improved sewerage appropriation	17,669 21	
		$22,923 23

Digitized by Google

Charged as follows:

Material	$3,735 83
Salaries of assistant engineers	3,404 75
Contract reservations	1,795 00
Sundries, improved sewerage system	244 11
Sundries	228 60
Experiments in filtration at Ernest street station	220 33
Additional catch-basins	111 58
Patterns for sewer castings	110 00
Testing cement	60 52
Tools	16 70
Sewer in Chaffee street, from Appleton to Manton avenue	9 27
Sewer in Garden street, from Jackson about 140 feet westerly	359 92
Carriage shed at Ernest street station—to build	227 22
Connecting lateral sewers with improved sewerage system	58 11
Grading grounds at Ernest street station	143 33
Sewer in Disposal Division, Section 4	132 01
Sewer in Manton avenue and King street	1,495 77
Sewer in Moshassuck Division, Station 20	10,575 18
	$22,923 23

For maintenance, ... $11,203 92

Charged as follows:

Cleaning basins and sewers	$3,095 26
Repairing basins and sewers	2,359 73
Inspection of connections	612 08
Tools	461 24
Salary—superintendent	430 00
Barn expenses	364 57
Sundries	343 53
Cleaning and repairing old drains	190 45
Horses, wagons, harnesses, etc.	60 35
Filling cisterns, etc.	51 90
Repairs on buildings at sewer maintenance yard	49 20
Office expenses	38 20
Cleaning private connections	28 70
ERNEST STREET STATION.	
Engineers	745 73
Supplies	650 41
Cleaning screens	545 60
Amount carried forward	$10,026 95

Digitized by Google

Amount brought forward	$10,026 95	
Firemen	441 33	
Cleaning and repairing pumps	294 01	
Coal and wood	163 63	
Repairs on boilers	122 84	
Lights	72 60	
Repairs on engines	42 42	
Care of grounds	33 97	
Repairs on buildings	5 00	
Care of buildings	1 17	
	$11,203 92	

The *net* expenditure for construction of sewers to March 31, 1898, inclusive, was $6,072,766 36

The *net* expenditure for maintenance of sewers to March 31, 1898, inclusive, was 559,195 13

Bills deposited with the city treasurer for collection from January 1 to March 31, 1898, inclusive, amounted to $558 48

As follows:

Miscellaneous work	$232 39
Removing debris from Moshassuck river	110 87
Filling cisterns, etc	53 21
Cleaning private connections	43 88
Old flagstones	3 36
Sewer material	114 77
	$558 48

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $526 25

As follows:

Miscellaneous work	$123 10
Removing debris from Moshassuck river	110 87
Setting track grates for Union Railroad Company	68 81
Filling cisterns, etc	53 21
Cleaning private connections	52 13
Old flagstones	3 36
Sewer material	114 77
	$526 25

Digitized by Google

HIGHWAYS.

One permit to open street was issued during the quarter.

January 18th, the proposal of Crabtree & Havey to furnish and deliver 10,000 lineal feet granite curbing, was accepted. Amount, $4,600.00.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows:

Chambers street, from Huntington avenue to Potters	$887 82
Eddy street, from Broad to Morton and New York avenue	1,052 48
Grand avenue, from Angell street to South Angell	1,042 27
Irving avenue, from Taber to Blackstone boulevard	2,988 97
Lisbon street, from Chalkstone avenue to Regent	1,246 28
Milk street, from Chester avenue to Public street	749 65
Miner street, from Potters avenue to Sayles street	782 92
Osborn street, from Vale to Chalkstone avenue	1,562 43
Regent avenue, from Cornell street to its easterly termination	487 17
Westfield street, from Harrison to Fuller	475 05
Andem street, from Academy avenue to Canton street	85 11
Beach street, from Park to Holden	582 93
Blackstone street, from Eddy to Allens avenue	932 55
Brownell street, from Park to Francis	299 34
Easterly approach to new passenger station, from Exchange place to easterly termination, and westerly approach to new passenger station, from West Exchange street to West Exchange	773 64
Francis street, from West Exchange to bridge over Woonasquatucket river	753 21
Lyman street, from Dean to Franklin	773 92
Ontario street, from Melrose to Hamilton	764 26
Promenade street, from present end of pavement near railroad bridge to Steeple street, (a portion of)	208 43
Ruggles street, from Smith to Chad Brown	1,141 43
Whitney street, from Elmwood avenue to Alger	692 81
Total	$18,282 67

During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.

Oct. 21, 1897, *Roger street, from Power to Williams.*
" " " *Power street, from Ives to Gano.*

Digitized by Google

The following work was in progress March 31, 1898, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
May 16, 1895,	*Francis street, from Cove and Exchange place to Gaspee street:* — three-fourths completed.
" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.
May 20, 1897,	*Francis street, from West Exchange to bridge over the Woonasquatucket river:* — one-half completed.
July 1, "	*Approaches to new passenger station:* — nearly completed.
Sept. 16, "	*Miner street, from Potters avenue to Sayles street:* — gutters to be concreted.
Oct. 21, "	*Irving avenue, from Taber to Blackstone boulevard:* — gutters to be concreted.

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street:* — three-fourths completed.
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.

To Pave with Trinidad Asphalt.

322.	July 13, 1897,	*Approaches to new passenger station:* — two-thirds completed.

Digitized by Google

The following work, ordered by the board of aldermen and city council, had not commenced March 31, 1898, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Sept. 16, 1897,	*Peace street, from Elmwood avenue to Bucklin street.*
Nov. 18, "	*Whitmarsh street, from Updike to Elmwood avenue.*
Dec. 16, "	*Arlington avenue, east side, from Irving to University.*
" " "	*Ayrault street, from Valley to Chalkstone avenue.*
" " "	*Black street, from Orms to Chalkstone avenue.*
" " "	*Foster street, from Broad to Pine.*
" " "	*Lexington avenue, from Hamilton street to Broad.*
" " "	*Wayne street, from Nolan to Candace.*
" " "	*West Park street, from Holden to Senter.*

TO PUT IN GOOD CONDITION.

Sept. 16, 1897, *Irving avenue, from Grotto to its easterly termination.*

Bills approved on account of highways from January 1 to March 31, 1898, inclusive, amounted to:

Regular appropriation	$39,502 86	
Special appropriation	59 50	
Special credit appropriation	1,421 06	
		$40,983 42

Classified as follows:

Removing snow and ice	$12,889 46
Cleaning streets	6,951 02
Crushed stone — material and labor	4,681 37
Steam rollers—repairs and supplies	2,482 63
Amount carried forward	$27,004 48

Digitized by Google

Amount brought forward	$27,004 48	
Blacksmith and wheelwright shop	2,467 40	
Barn expenses	2,129 63	
Repairs on unpaved streets	1,863 09	
Tools, implements, etc	1,575 79	
Stone—paving and crosswalk	1,249 52	
Labor on material	1,180 22	
Repairs on stone crushers	838 26	
Salary — superintendent	442 00	
Horses, wagons, harnesses, etc	229 35	
Watchman at city yard	156 00	
Repairs on paved streets	144 50	
Office expenses—city yard	58 18	
Sundries	49 14	
Building driveways, etc	37 58	
Watering streets	9 50	
		$39,434 64

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Power street, from Ives to Gano	$932 94	
Roger street, from Power to Williams	488 12	
		1,421 06

Grade and Put in Good Condition.

Allens avenue, from Public street to Henderson	$65 52	
Montgomery avenue, from Virginia to Maryland, and *Alabama avenue*, from Maryland to Montgomery	2 70	
		68 22

Pave with Trinidad Asphalt.

The two approaches to the proposed depot in Exchange place		59 50
		$40,983 42

Bills deposited with the city treasurer for collection from January 1 to March 31, 1898, inclusive, amounted to $6,832 74

Digitized by Google

As follows:

Union Railroad Company, for granite blocks.....	$5,250 92
Union Railroad Company, for removing snow.....	657 75
Boarding horses for other departments.....	329 73
Labor and materials.....	304 28
Street sweepings.....	212 00
Manure from barn	72 00
Blacksmith and harness work for other departments.....	3 06
Removing trees.....	3 00
	$6,832 74

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of . . . $8,257 03

As follows:

Union Railroad Company, for granite blocks.....	$5,160 75
Labor and materials.....	1,453 44
Union Railroad Company, for removing snow.....	657 75
Blacksmith and harness work for other departments.....	368 36
Boarding horses for other departments.....	329 73
Street sweepings.....	212 00
Manure from barn.....	72 00
Removing trees.....	3 00
	$8,257 03

SIDEWALKS AND CURBING.

Bills approved on account of sidewalks and curbing from January 1 to March 31, 1898, inclusive, amounted to $739 10

Charged as follows:

Concreting sidewalks.....	$522 50
Granite curbing.....	216 60
	$739 10

Curbing bills deposited with the city treasurer for collection from January 1 to March 31, 1898, inclusive, amounted to $18,693 43

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $4,380 85

As follows:

Curbing bills	$4,358 89
Concreting sidewalks	21 96
	$4,380 85

CITY ENGINEER.

Bills approved on account of the city engineer's department from January 1 to March 31, 1898, inclusive, amounted to . . . $10,922 27

Charged as follows:

Salary—city engineer	$1,125 00
Salaries of assistants	8,474 23
Salaries of clerks	763 75
Supplies—drawing material, etc	281 34
Car fares	205 90
Instruments and repairs	58 25
Sundries	13 80
	$10,922 27

BRIDGES.

February 12th, the proposal of Hovey Lumber Company to furnish and deliver 38,000 feet, B. M., spruce lumber at Washington and Point street bridges was accepted.

The following work was in progress at the end of the quarter, namely:

No. of resolution	Date of approval.	
158.	April 20, 1897,	*Weybosset bridge and river walls.*
446.	Nov. 19, 1897,	*Weybosset bridge extension.*

Digitized by Google

Bills approved on account of bridges from January 1 to March 31, 1898, inclusive, amounted to $3,464 67

Charged as follows:

Acorn street bridge	$19 58
Barn expenses	91 42
Branch avenue bridge	1 35
Building at city yard	5 88
Eagle street bridge	2 18
Exchange bridge	96 54
Gaspee street bridge	13 70
Geneva bridge	3 62
Horses, wagons, harnesses, etc	12 43
Lumber, hardware, etc	19 13
Mill street bridge	8 20
Park street bridge	1 55
Point street bridge	250 32
Randall street bridge	3 90
Red bridge	151 47
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	978 25
Salaries—Red bridge	504 50
Salaries—Washington bridge	481 00
Sundries	337 26
Tools	183 84
Veazie street bridge	101 25
Wanskuck bridge	17 92
Washington bridge	138 13
Weybosset bridge	11 25
	$3,464 67

Bills deposited with the city treasurer for collection from January 1 to March 31, 1898, inclusive, amounted to $302 96

As follows:

Union Railroad Company, for miscellaneous work	$175 00
New York, New Haven, and Hartford Railroad Company, for granite blocks	110 37
Union Railroad Company, for granite blocks	8 34
Old lumber	7 25
Sweepings from Washington bridge	2 00
	$302 96

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of . . $127 96

As follows :

New York, New Haven, and Hartford Railroad Company, for granite blocks	$110 37
Union Railroad Company, for granite blocks	8 34
Old lumber	7 25
Sweepings from Washington bridge	2 00
	$127 96

Bills approved for account of rebuilding the Weybosset bridge and river walls, from January 1 to March 31, 1898, inclusive, have been paid from the special appropriation for that work, to the amount of $17,224 36

PUBLIC WORKS OFFICE.

Bills approved for account of the public works office, from January 1 to March 31, 1898, inclusive, amounted to $5,139 17

Charged as follows :

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,948 91
Office supplies	265 26
	$5,139 17

ROBERT E. SMITH,

Commissioner.

Digitized by Google

SIXTY-SECOND QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1898.

P 72366

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
13 Custom House street.
1898.

Digitized by Google

Digitized by Google

SIXTY-SECOND QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1898.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1898.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72366
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1900.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., July 1, 1898.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the sixty-second quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending June 30, 1898:

WATER WORKS.

May 18th, the proposal of John R. White & Son to furnish and deliver at Hope Pumping Station 400 tons of egg coal at $4.75 per ton, was accepted.

June 14th, the proposal of R. B. Little & Co. to furnish and deliver Georges Creek Cumberland coal at Pettaconset Pumping Station for one year from July 1, 1898, at $3.55 per ton, was accepted.

The average daily consumption of water during the last quarter was 8,915,433 gallons.

Digitized by Google

Water pipes were laid during the quarter as follows:

30-INCH.

In Plainfield street, in town of Johnston	1,435.26 feet.

12-INCH.

In East and Mt. Pleasant avenues	2,495.53 feet.

10-INCH.

In Laban street, in town of Johnston	6.67 feet.

8-INCH.

In Ernest street and Taber avenue; in Plainfield street, in town of Johnston; in Narragansett boulevard and Pontiac avenue, in town of Cranston	3,336.52 feet.

6-INCH.

In Aplin and Bugbee courts; Beaufort, Bell, Berkshire, Bissell, Capwell, Case, Cedar, Chaucer, Depew, Dike, Eighth, Fairview, Harold, Larch, Lloyd, Oak, Peace, Powdermill, Roanoke and Rowley streets; Grosvenor, Lorimer, Oriole, Summit and University avenues; in Laban, Saunders, Vermont, Waterman and Williams streets, in town of Johnston; in Asia, Beckwith, Grace and Smith streets; Arnold, Franklin, Orchard and Victoria avenues, in town of Cranston	6,608.15 feet.
Total	13,882.13 feet.

or, 2.629+ miles.

Water pipes were removed or abandoned during the quarter, as follows:

8-INCH.

From Park avenue, in town of Cranston	30.45 feet.

6-INCH.

From Mt. Pleasant avenue; from Laban and Waterman streets, in town of Johnston	1,961.59 feet.
Total	1,992.04 feet.

or, .377+ mile.

Digitized by Google

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	61,328.30 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	34,084.95 feet.
12-inch	92,817.16 feet.
10-inch	15,057.14 feet.
8-inch	259,289.92 feet.
6-inch	1,124,249.94 feet.
Total	1,650,091.03 feet.

or, 312.517+ miles.

Statement of sizes and lengths of pipe laid for the Special Water Service for Fire Protection, since the commencement of the work:

24-inch	4,188.58 feet.
16-inch	23,004.37 feet.
12-inch	2,215.76 feet.
Total	29,408.71 feet.

or, 5.569+ miles.

Five fire hydrants have been set during the quarter, one in each of the following locations:

Berkshire street, south side, on east building line of Douglas avenue.
Mount Pleasant avenue, east side, north-east corner of Fairview street.
Oak street, north side, 314 feet east of gate on east line of Troy street.
Pontiac avenue, Cranston, north-east side, on north-east building line of Beckwith street.
Wellington street, Cranston, east side, 583 feet south of Monument street.

The total number of fire hydrants, exclusive of hydrants for special service for fire protection, is now seventeen hundred and ninety-five — seventeen hundred and twenty-one flush, and seventy-four post hydrants.

One fire hydrant was set during the quarter, on Special Water Service for Fire Protection, at the following location:

Digitized by Google

Stevens street, south side, forty-three feet west of west line of Bark street.

The total number of fire hydrants on the Special Water Service for Fire Protection is ninety.

During the quarter, two hundred and twenty-one water meters were set, of which number forty-one were to replace other meters. The use of three meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾ in.	1-in.	1½ in.	2-in.	3-in.	4-in.	6 in.	
Ball & Fitts, piston	3,180	630	153	25	7	.....	.....	.....	3,995
Ball & Fitts, rotary	.....	.....	11	15	1	3	2	.....	35
Crown	7,472	766	235	106	28	15	17	.....	8,639
Empire	70	12	8	7	3	.....	.....	.....	100
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	3	10	7	1	21
Thomson	2,683	372	76	54	22	7	7	4	3,225
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	1	1	.....	.....	1	.....	1	.....	4
	13,434	1,781	487	207	65	35	34	5	16,048

Seven plumbers' licenses were issued during the quarter, making the total number one hundred and fifteen, all of which expire December 31, 1898.

Nine hundred and sixty-four permits to do plumbing work were issued during the quarter.

One hundred and eighty-two applications for water were made during the quarter, making the total number June 30, 1898, twenty-two thousand seven hundred and one.

Digitized by Google

The number of new service stops opened during the quarter was one hundred and sixty-five.

The total number of service stops opened to June 30, 1898, inclusive, was twenty-two thousand and five. The number in actual use June 30, 1898, was twenty thousand three hundred and twenty-three.

The amount of bills approved on account of water works from April 1 to June 30, 1898, inclusive, was:

For construction and extension, . . . $15,135 83

Classified as follows:

Laying water pipes	$5,064 65
Cast iron water pipe	4,922 33
Special castings	1,318 06
Laying service pipes	805 62
Patterns for special castings	598 88
Stop valves	564 80
Labor on and carting pipe	528 58
Fire hydrants, boxes, and covers	396 00
Taps and stops	347 60
Tools	189 99
Barn expenses	185 01
Wharf salaries	180 00
Horses, wagons, harnesses, etc	34 31
	$15,135 83

For maintenance, ... $20,149 25

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,100 54	
Engineers	484 92	
Sundries	464 70	
Firemen	392 40	
Superintendence	276 00	
Care of grounds	126 38	
Oil, waste and packing	63 93	
Barn expenses	50 47	
Labor on fuel	34 80	
Lights	14 51	
Worthington high-duty pumping engine	13 07	
Cornish engine house	9 15	
		$4,[illegible] 87
Amount carried forward		[illegible]

Digitized by Google

Amount brought forward		$4,030 87
Sockanosset Reservoir.		
Sundries	$205 26	
Watchman	168 00	
		373 26
Hope Pumping Station.		
Coal and wood	$1,900 00	
Firemen	386 40	
Engineers	276 00	
Care of grounds	132 00	
Repairs on boilers	69 02	
Lights	67 41	
Oil, waste, and packing	27 06	
Sundries	21 40	
		2,879 29
Hope Reservoir.		
Watchman	$189 00	
Sundries	163 08	
		352 08
Fruit Hill Reservoir.		
Sundries	$414 97	
Watchman	189 00	
		603 97
Pipe Line and Service Stops.		
Repairs	$2,861 21	
Superintendence — salaries	782 00	
		3,643 21
Meter Department.		
Water meters	$3,970 31	
Setting and repairing meters	1,880 86	
		5,851 17
Miscellaneous.		
Clerks' and inspectors' salaries	$1,326 84	
Prevention of defilement of the Pawtuxet	549 99	
Barn expenses	222 69	
Horses, wagons, harnesses, etc	115 48	
Analyses of water	90 00	
Sundries	57 62	
Pipe yard, office expenses	22 43	
Real estate at Pawtuxet	17 50	
Public drinking fountains and troughs	11 60	
Telephone lines	1 25	
		2,415 40
		$20,149 25

Digitized by Google

The amount of expenditures from April 1 to June 30, 1898, inclusive, was . $35,285 08

The total expenditures to June 30, 1898, inclusive, were $8,706,475 26

The *net* expenditure for construction and extension from April 1 to June 30, 1898, inclusive, was	$14,741 34
The *net* expenditure for construction and extension to June 30, 1898, inclusive, was	$6,408,418 29
The *net* expenditure for maintenance from April 1 to June 30, 1898, inclusive, was	$14,814 25
The *net* expenditure for maintenance to June 30, 1898, inclusive, was	$1,444,639 74

The value of the water works system January 1, 1898, as estimated by the city engineer, was as follows :

Pettaconset pumping station	$340,694 00	
Hope pumping station	143,784 15	
Sockanosset, Hope, and Fruit Hill reservoirs	751,629 00	
Main lines and distribution pipes	2,764,100 98	
Real estate in Pawtuxet and Lincoln	15,975 00	
Tools and supplies	31,866 70	
		$4,048,049 83

Bills deposited with the city treasurer for collection from April 1 to June 30, 1898, inclusive, amounted to . . . $57,359 15

As follows :

Water	$51,389 46
Water meters	3,684 25
Setting and repairing meters	1,650 85
Rent of real estate	168 00
Permanently closing service stops	60 00
Penalties	44 00
Examination and repairs of pipe line	30 75
Labor and material, laying service pipes, etc	331 84
	$57,359 15

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $63,334 91

As follows:

Water	$57,561 42
Water meters	3,618 00
Setting and repairing meters	1,475 50
Rent of real estate	168 00
Permanently closing service stops	60 00
Penalties	44 00
Examinations and repairs on pipe line	13 50
Labor and material, laying service pipes, etc	394 19
	$63,334 91

SEWERS.

During the quarter ending June 30, 1898, five hundred and forty-six permits were issued to drain layers — three hundred and thirty-five for new work, and two hundred and eleven for extension and repairs of drains.

Seven drain layers' licenses were issued during the quarter, making the total number forty-nine, all of which expire December 31, 1898.

June 14th, the proposals of R. B. Little & Co. and Providence Coal Co., for each to furnish and deliver at Ernest Street Pumping Station one-half the Sterling coal required for one year from July 1, 1898, at $2.90 per ton, were accepted.

June 16th, the proposal of Coffin Valve Co., of Neponset, Mass., to furnish and deliver the gates required for the

Digitized by Google

precipitation tanks of the Improved Sewerage System, was accepted. Amount, $3,150.

During the quarter, assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Whitmarsh, Gilmore, D, and Booth streets	$3,478 52
Peace and Bucklin streets	5,155 50
Miner, Sayles, and Oxford streets and Lexington avenue	5,354 03
Huntington avenue, Carter and Vineyard streets	5,883 66
Atwells avenue	892 01
Broad street (west side)	649 22
Vale and Danforth streets	2,924 52
Pekin and Osborn streets and Franklin avenue	7,889 35
Chaffee street	2,034 66
Arlington avenue	5,592 58
Fillmore and Oregon streets	2,848 10
Bacon, North Main, Randall, and Printery streets	6,877 14
Hamilton, Irving, and Melrose streets	80 00
Peace street	2,687 56
South Angell street and Butler avenue	2,417 56
Chalkstone avenue, from North Davis street to Douglas avenue	2,375 64
Chalkstone avenue, from near Claremont street to Winthrop	2,656 90
Douglas avenue	3,161 87
Gallup street	1,277 14
Smith, Violet, and Ayrault streets	7,638 67
Smith street	7,436 02
Wayne, Danforth, and Mathew streets	3,532 27
Irving and Humboldt avenues	4,873 96
Blackstone boulevard (east side)	294 90
Wickenden street	376 17
Link street	656 98
Princeton avenue	1,693 45
Calder and Madison streets	2,963 40
Doyle avenue	6,249 50
Prospect street	1,098 41
Halsey street	484 10
Power and Roger streets	1,578 91
Waterman street	2,177 47
Henderson street	3,463 75
Garden street	164 12
Total	$108,918 04

Digitized by Google

April 28th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To Edward W. Everson.

No. of resolution.	Date of approval.				
572.	Dec.	20,	1895,	*Section 21, Moshassuck Division, Improved Sewerage System,*	$44,094 90
572.	"	"	"	*Section 22, Moshassuck Division, Improved Sewerage System,*	26,939 80

To James J. Newman.

202.	May	20,	1898,	*Section 23, Woonasquatucket Division, Improved Sewerage System,*	$19,732 90

May 16th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

To Frank Gammino.

No. of resolution.	Date of approval.				
394.	Oct.	5,	1897,	*Broad and Rugby streets,*	$2,859 10
416.	"	26,	"	*Columbian avenue and Roger Williams Park,*	3,049 31
152.	May	3,	1898,	*Baker street, from Eddy to Broad,*	1,192 26
153.	"	"	"	*Public street, from Eddy to Allens avenue,*	1,838 01
154.	"	"	"	*Sayles street, from Ocean to Plain,*	678 24

Digitized by Google

No. of resolution.	Date of approval.				
155.	May	3,	1898,	*Trenton street, from Ives to Gano,*	$966 92
156.	"	"	"	*Washburn and Common streets,*	756 45
157.	"	"	"	*Broad street, east side, from Buckley street to end of sewer in Potters avenue,*	390 11

June 1st, a contract for the construction of the following sewer was awarded, namely:

To William H. Sherman.

No. of resolution.	Date of approval.				
189.	May	20,	1898,	*Babbitt street, from Black to Quaid,*	$502 77

During the quarter, the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
572.	Dec.	20,	1895,	*Moshassuck River and West River Divisions, Improved Sewerage System, Section* 20,	May 7, 1898.
153.	May	3,	1898,	*Public street, from Eddy to Allens avenue,*	June 27, 1898.
154.	"	"	"	*Sayles street, from Ocean to Plain,*	June 20, 1898.
157.	"	"	"	*Broad street, east side, from Buckley street to end of sewer in Potters avenue,*	June 25, 1898.
189.	"	"	"	*Babbitt street, from Black to Quaid,*	June 25, 1898.

Digitized by Google

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
406.	July 15, 1889,	*Section 2, Sewage Precipitation Tanks, Improved Sewerage Syetem.*
572.	Dec. 20, 1895,	*Section 21, Moshassuck Division, Improved Sewerage System.*
202.	May 20, 1898,	*Section 23, Woonasquatucket Division, Improved Sewerage System.*

Work upon the following lateral sewer was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.	
152.	May 3, 1898,	*Baker street, from Eddy to Broad.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced June 30, 1898, namely:

No. of resolution.	Date of approval.	
572.	Dec. 20, 1895,	*Section 22, Moshassuck Division, Improved Sewerage System.*
394.	Oct. 5, 1897,	*Broad and Rugby streets.*
416.	" 26, "	*Columbian avenue and Roger Williams Park.*
155.	May 3, 1898,	*Trenton street, from Ives to Gano.*
156.	" " "	*Washburn and Common streets.*
190.	" 20, "	*Mill street, east side, from North Main to Bark.*
211.	June 10, "	*Parnell street, from its northerly termination to Atwells avenue.*

Digitized by Google

The amount of bills approved on account of sewers from April 1 to June 30, 1898, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$13,218 57	
Improved sewerage appropriation	39,146 80	
		$52,365 37

Charged as follows:

Material	$11,048 49
Salaries of assistant engineers	2,743 50
Contract reservations	699 00
Sundries	549 83
Testing cement	270 71
Additional catch-basins	214 28
Patterns for sewer castings	115 00
Sundries, improved sewerage system	104 00
Tools	14 76
Experiments in filtration at Ernest street station	10 50
Sewer in Atwells avenue, from Woonasquatucket river to Valley street	112 88
Sewer in Babbitt street, from Black to Quaid	603 91
Sewer in Baker street, from Eddy to Broad	734 59
Sewer in Broad street, east side, from Buckley to end of sewer in Potters avenue	416 82
Sewer in Public street, from Eddy to Allens avenue	2,041 52
Sewer in Sayles street, from Ocean to Plain	690 42
Building roadway from Ernest street station to precipitation tanks	775 79
Carriage shed at Ernest street station—to build	15 75
Connecting lateral sewers with improved sewerage system	92 00
Grading grounds at Ernest street station	1,418 74
Sewer in Manton avenue and King street	1,355 75
Sewer in Moshassuck Division, Section 20	6,903 45
Sewer in Moshassuck Division, Section 21	5,789 65
Sewer in Woonasquatucket Division, Section 23	5,422 61
Sewage precipitation tanks—to build	10,221 42
	$52,365 37

For maintenance, ... $12,988 10

Charged as follows:

Cleaning basins and sewers	$4,001 97
Repairing basins and sewers	2,894 23
Cleaning and repairing old drains	1,078 79
Inspection of connections	651 07
Amount carried forward	$8,626 06

Digitized by Google

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $547 41

As follows:

Miscellaneous work	$248 31
Cleaning private connections	69 25
Setting track grates for Union Railroad Company	22 76
Pumping out cellars, etc	19 35
Old manhole frame and cover	2 40
Sewer material	151 02
Laying drains to curbstone	34 32
	$547 41

HIGHWAYS.

Five permits to open streets were issued during the quarter.

During the quarter, statements of the cost of concreting sidewalks in sundry streets, done under authority conferred by the City Council by Resolution No. 446, approved Sept. 27, 1895, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, amounting to the sum of $1,588.62.

During the quarter, the following work was completed:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 16, 1897,	*Miner street, from Potters avenue to Sayles street.*
Oct. 21, "	*Irving avenue, from Taber to Blackstone boulevard.*

To Macadamize.

April 7, 1898,	*Sprague street, from Elmwood avenue to Dexter street.*

Digitized by Google

The following work was in progress June 30, 1898, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Francis street, from Cove and Exchange place to Gaspee street:* — three-fourths completed.
" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.
May 20, 1897,	*Francis street, from West Exchange to bridge over the Woonasquatucket river:* — one-half completed.
July 1, "	*Approaches to new passenger station:* — nearly completed.
Sept. 16, 1897,	*Peace street, from Elmwood avenue to Bucklin street:* — gutters to be concreted.

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street:* — three-fourths completed.
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.

TO PAVE WITH TRINIDAD ASPHALT.

322.	July 13, 1897,	*Approaches to new passenger station:* — two-thirds completed.

The following work, ordered by the board of aldermen and city council, had not commenced June 30, 1898, namely:

Digitized by Google

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Nov. 18, 1897,	*Whitmarsh street, from Updike to Elmwood avenue.*
Dec. 16, "	*Arlington avenue, east side, from Irving to University.*
" " "	*Ayrault street, from Valley to Chalkstone avenue.*
" " "	*Black street, from Orms to Chalkstone avenue.*
" " "	*Foster street, from Broad to Pine.*
" " "	*Lexington avenue, from Hamilton street to Broad.*
" " "	*Wayne street, from Nolan to Candace.*
" " "	*West Park street, from Holden to Senter.*
June 16, 1898,	*Arlington avenue, east side, from University avenue to Lloyd.*
" " "	*Columbian avenue, from Broad street to Roger Williams Park.*

To Put in Good Condition.

Sept. 16, 1897,	*Irving avenue, from Grotto to its easterly termination.*

Bills approved on account of highways from April 1 to June 30, 1898, inclusive, amounted to:

Regular appropriation	$56,161 26	
Special appropriation	660 75	
Special credit appropriation	3,477 80	
		$60,299 81

Classified as follows:

Cleaning streets	$16,268 76
Repairs on unpaved streets	13,603 55
Repairs on paved streets	8,591 15
Crushed stone—material and labor	6,368 74
Amount carried forward	$44,832 20

Digitized by Google

Amount brought forward	$44,832 20	
Blacksmith and wheelwright shop	2,537 91	
Barn expenses	1,899 98	
Steam rollers—repairs and supplies	1,088 86	
Tools, implements, etc	1,070 32	
Removing snow and ice	889 12	
Repairs on stone crushers	801 11	
Labor on material	620 04	
Horses, wagons, harnesses, etc	435 16	
Salary—superintendent	408 00	
Stone—paving and crosswalk	285 52	
Building driveways, etc	180 74	
Watchman at city yard	144 00	
Watering streets	115 34	
Sundries	75 87	
Office expenses—city yard	45 58	
Fencing streets—material and labor	8 00	
		$55,437 75

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Brownell street, from Park to Francis	$19 48	
Irving avenue, from Taber to Blackstone boulevard	457 97	
Miner street, from Potters avenue to Sayles street	927 38	
Peace street, from Elmwood avenue to Bucklin street	658 15	
Power street, from Ives to Gano	1,010 86	
Roger street, from Power to Williams	332 22	
		3,406 06

Pave with Granite Blocks.

Francis street, from Cove and Exchange place to Gaspee street	162 00

Pave with Trinidad Asphalt.

The two approaches to the proposed depot in Exchange place	498 75

Pave with Granite Blocks and Cobble.

Eddy street, from Henderson to Public	71 74

To Repair.

Sprague street, from Elmwood avenue to Dexter street	723 51
	$60,299 81

Digitized by Google

Bills deposited with the city treasurer for collection, from April 1 to June 30, 1898, inclusive, amounted to . . $2,511 65

As follows:

Blacksmith and harness work for other departments	$623 54	
Boarding horses for other departments	494 93	
Labor and material	415 50	
Street sweepings	342 63	
Union Railroad Company, for granite blocks, etc.	303 20	
Providence Gas Company, for granite blocks, etc.	235 60	
Manure from barn	72 00	
Removing trees	20 00	
Use of horse scraper	2 25	
Discharging cargoes at city wharf	2 00	
	$2,511 65	

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $1,992 33

As follows:

Labor and material	$753 75	
Union Railroad Company, for granite blocks, etc.	303 20	
Blacksmith and harness work for other departments	297 03	
Boarding horses for other departments	273 10	
Street sweepings	269 00	
Manure from barn	72 00	
Removing trees	20 00	
Use of horse scraper	2 25	
Use of engine discharging cargo at city wharf	2 00	
	$1,992 33	

SIDEWALKS AND CURBING.

Bills approved on account of sidewalks and curbing from April 1 to June 30, 1898, inclusive, amounted to $2,654 13

Charged as follows:

Granite curbing	$1,664 66	
Concreting sidewalks	989 47	
	$2,654 13	

Digitized by Google

Curbing bills deposited with the city treasurer for collection from April 1 to June 30, 1898, inclusive, amounted to $52 20

During the quarter, coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to $4,783 31

CITY ENGINEER.

Bills approved on account of the city engineer's department from April 1 to June 30, 1898, inclusive, amounted to $10,557 16

Charged as follows:

Salary—city engineer	$1,125 00
Salaries of assistants	8,195 51
Salaries of clerks	705 00
Supplies—drawing material, etc.	278 95
Car fares	205 70
Instruments and repairs	24 65
Sundries	11 35
Meteorological instruments and repairs	11 00
	$10,557 16

Bills deposited with the city treasurer for collection from April 1 to June 30, 1898, inclusive, amounted to $1 90

As follows:

Steel tapes	$1 15
Blue process paper	75
	$1 90

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $1 90

As follows:

Steel tapes	$1 15
Blue process paper	75
	$1 90

Digitized by Google

BRIDGES.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
158.	April 20, 1897,	*Weybosset bridge and river walls.*
187.	May 20, 1898,	*Weybosset bridge extension.*

Bills approved on account of bridges from April 1 to June 30, 1898, inclusive, amounted to $4,573 67

Charged as follows:

Acorn street bridge	$19 37
Atwells avenue bridge	2 30
Barn expenses	75 22
Building at city yard	21
Burnside bridge	34 92
Charles street bridge	22 85
Delaine street bridge	2 30
Eagle street bridge	2 98
Exchange bridge	35 20
Gaspee street bridge	23 77
Geneva bridge	96 78
Horses, wagons, harnesses, etc	18 98
Lumber, hardware, etc	25 59
Park street bridge	2 32
Point street bridge	975 02
Randall street bridge	6 45
Red bridge	178 92
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	903 00
Salaries—Red bridge	462 00
Salaries—Washington bridge	444 00
Smith street bridge	21 29
Smithfield avenue bridge	3 98
Stevens street bridge	12 45
Sundries	77 95
Tools	105 12
Valley street bridge—north span	2 30
Veazie street bridge	14 50
Washington bridge	970 10
Whelden street bridge	3 80
	$4,573 67

Digitized by Google

Bills deposited with the city treasurer for collection, for old lumber sold, from April 1 to June 30, 1898, inclusive, amounted to . . $1 00

During the quarter, coupons from bills collected have been returned by the city treasurer, and receipted for, to the amount of . $176 00

As follows :

Union Railroad Company, for miscellaneous work.	$175 00
Old lumber	1 00
	$176 00

Bills approved for account of rebuilding the Weybosset bridge and river walls, from April 1 to June 30, 1898, inclusive, have been paid from the special appropriation for that work, to the amount of $34,540 68

PUBLIC WORKS OFFICE.

Bills approved for account of the public works office, from April 1 to June 30, 1898, inclusive, amounted to $4,689 12

Charged as follows :

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	2,654 84
Office supplies	109 28
	$4,689 12

ROBERT E. SMITH,
Commissioner.

Digitized by Google

1888] CITY DOCUMENT No. 37.

5851

SIXTY-THIRD QUARTERLY REPORT

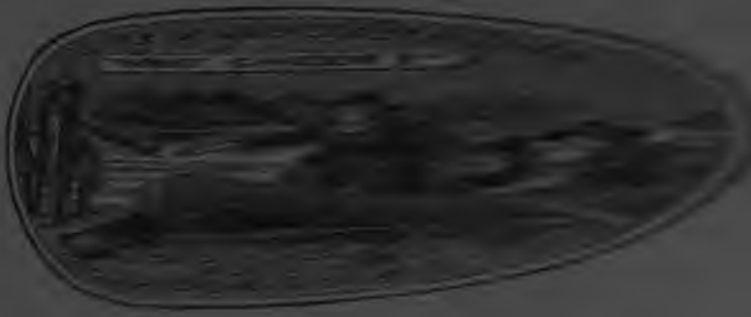
OF THE

Department of Public

OF THE

CITY OF PROVIDENCE.

QUARTER ENDING SEPTEMBE



Digitized by Google

Digitized by Google

SIXTY-THIRD QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1898.

The Providence Press.
Snow & Farnham, [illegible]
[illegible]

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 58511
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1900.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., [illegible]

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter [illegible] of the ordinances, the Commissioner of Public Works [illegible] presents the sixty-third quarterly report of the expenditures by the several departments under his control, [illegible] with statements of work ordered and the [illegible] of same, for the quarter ending Sept. 30, [illegible]

WATER WORKS.

The average daily consumption of water during the [illegible] quarter was 9,[illegible] gallons.

Water pipes were laid during the quarter as follows:

[illegible]

At Weybosset bridge..... [illegible]

[illegible]

In Charles, Dyer and Pelham streets and in [illegible] town of North Providence..... [illegible]

[illegible]

In Bend, Eutaw, Ladd, Pitman, [illegible] South Water streets, [illegible] Union avenues; in [illegible] and Washington avenues, in the [illegible]..... [illegible]

Total..... [illegible]

or, .844 + mile.

Digitized by Google

Water pipes were removed or abandoned during the quarter, as follows:

24-INCH.	
At Weybosset bridge	266.82 feet.
8-INCH.	
From Dyer street, at Weybosset bridge	18.08 feet.
6-INCH.	
From Pelham street	38.34 feet.
Total	323.24 feet.

or, .061 + mile.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	61,328.30 feet.
24-inch	43,590.79 feet.
20-inch	9,626.59 feet.
16-inch	34,084 95 feet.
12-inch	92,817.16 feet.
10-inch	15,057.14 feet.
8-inch	260,321.94 feet.
6-inch	1,127,316.02 feet.
Total	1,654,226.89 feet.

or, 313.300 + miles.

Statement of sizes and lengths of pipe laid for the Special Water Service for Fire Protection, since the commencement of the work:

24-inch	4,188.58 feet.
16-inch	23,004.37 feet.
12-inch	2,215.76 feet.
Total	29,408.71 feet.

or, 5.569 + miles.

Six fire hydrants have been set during the quarter, one in each of the following locations:

Digitized by Google

Chestnut avenue, Cranston, north side, 309 feet west of gate at Pontiac avenue.
East Manning street, north side, 255 feet east of Gano street.
Oakland avenue, Cranston, northeast corner of Summer street.
Pitman street, north side, on east building line of Butler avenue.
Rhode Island avenue, north side, 257 feet east of Butler avenue.
Trenton street, south side, southwest corner of Gano street.

The total number of fire hydrants, exclusive of hydrants for special service for fire protection, is now eighteen hundred and one — seventeen hundred and twenty-five flush, and seventy-six post hydrants.

The total number of fire hydrants on the Special Water Service for Fire Protection is ninety.

During the quarter, two hundred and thirty-nine water meters were set, of which number thirty-nine were to replace other meters. The use of ten meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½ in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,174	624	152	23	7	.....	.....	.....	3,980
Ball & Fitts, rotary	.....	.....	12	15	1	3	2	.....	33
Crown	7,552	778	240	110	27	10	17	.....	8,740
Empire	87	15	9	9	3	.....	.....	.....	123
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	3	14	8	1	26
Thomson	2,761	381	76	54	22	7	7	[illegible]	[illegible]
Trident	28	.....	.....	.....	.....	.....	.....	.....	[illegible]
Worthington	1	1	.....	.....	1	.....	1	.....	[illegible]
	13,603	1,799	490	211	64	40	35	4	[illegible]

Digitized by Google

Two plumbers' licenses were issued during the quarter, making the total number one hundred and seventeen, all of which expire December 31, 1898.

Eight hundred and seventy-seven permits to do plumbing work were issued during the quarter.

One hundred and thirty-six applications for water were made during the quarter, making the total number September 30, 1898, twenty-two thousand eight hundred and thirty-seven.

The number of new service stops opened during the quarter was one hundred and fifty-eight.

The total number of service stops opened to September 30 1898, inclusive, was twenty-two thousand one hundred and sixty-three. The number in actual use September 30, 1898, was twenty thousand four hundred and eighty-six.

The amount of bills approved on account of water works from July 1 to September 30, 1898, inclusive, was:

For construction and extension, . . . $5,289 90

Classified as follows:

Laying water pipes	$2,098 46
Laying service pipes	901 86
Special castings	727 02
Repairs on pipe yard buildings	449 17
Fire hydrants, boxes, and covers	252 00
Barn expenses	235 32
Wharf salaries	227 14
Horses, wagons, harnesses, etc	176 20
Labor on and carting pipe	78 80
Patterns for special castings	65 00
Tools	57 89
Sundries	21 04
	$5,289 90

Digitized by Google

For maintenance, ... $19,126 83

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,067 04	
Sundries	628 34	
Engineers	559 96	
Firemen	442 50	
Superintendence	318 71	
Cornish pumping engine	150 40	
Care of grounds	92 55	
Oil, waste, and packing	72 94	
Barn expenses	49 49	
Labor on fuel	40 05	
Real estate	14 42	
Worthington high-duty pumping engine	6 36	
Lights	3 63	
Cornish engine house	43	
		$4,446 82

SOCKANOSSET RESERVOIR.

Watchman	$194 00	
Sundries	35 95	
		229 95

HOPE PUMPING STATION.

Firemen	$446 20	
Engineers	318 71	
Care of grounds	145 25	
Lights	57 33	
Sundries	31 98	
Repairs on boilers	5 18	
		1,004 65

HOPE RESERVOIR.

Sundries	$232 15	
Watchman	218 25	
		450 40

FRUIT HILL RESERVOIR.

Sundries	$458 03	
Watchman	218 25	
		676 28
Amount carried forward		$6,808 10

Digitized by Google

Amount brought forward		$6,808 10

PIPE LINE AND SERVICE STOPS.

Repairs	$3,653 50	
Superintendence — salaries	910 35	
		4,563 85

METER DEPARTMENT.

Water meters	$2,902 68	
Setting and repairing meters	1,420 79	
		4,323 47

MISCELLANEOUS.

Clerks' and inspectors' salaries	$1,574 86	
Telephone lines	550 71	
Prevention of defilement of the Pawtuxet	549 99	
Barn expenses	270 83	
Horses, wagons, harnesses, etc	226 88	
Analyses of water	105 00	
Public drinking fountains and troughs	75 46	
Sundries	43 17	
Town of Lincoln, tax	27 50	
Pipe yard, office expenses	7 01	
		3,431 41
		$19,126 83

The amount of expenditures from July 1 to September 30, 1898, inclusive, was . $24,416 73

The total expenditures to September 30, 1898, inclusive, were $8,730,891 99

The *net* expenditure for construction and extension from July 1 to September 30, 1898, inclusive, was	$4,288 90
The *net* expenditure for construction and extension to September 30, 1898, inclusive, was	$6,412,707 19
The *net* expenditure for maintenance from July 1 to September 30, 1898, inclusive, was	$13,035 48
The *net* expenditure for maintenance to September 30, 1898, inclusive, was	$1,457,675 22

The value of the water works system January 1, 1898, as estimated by the city engineer, was as follows :

Digitized by Google

Pettaconset pumping station	$340,694 00	
Hope pumping station	143,784 15	
Sockanosset, Hope, and Fruit Hill reservoirs	751,629 00	
Main lines and distribution pipes	2,764,100 98	
Real estate in Pawtuxet and Lincoln	15,975 00	
Tools and supplies	31,866 70	
		$4,048,049 83

Bills deposited with the city treasurer for collection from July 1 to September 30, 1898, inclusive, amounted to . . $59,304 76

As follows:

Water	$51,899 31
Water meters	4,150 50
Setting and repairing meters	1,804 40
Rent of real estate	150 50
Penalties	58 00
Permanently closing service stops	55 00
Repairs on pipe line	7 85
Labor and material, laying service pipes, etc	1,179 20
	$59,304 76

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $88,989 44

As follows:

Water	$81,839 09
Water meters	4,214 75
Setting and repairing meters	1,648 10
Rent of real estate	150 50
Penalties	58 00
Permanently closing service stops	55 00
Repairs on pipe line	23 00
Labor and material, laying service pipes, etc	997 72
Old iron	3 28
	$88,989 44

The amount of bills approved on account of water works for the fiscal year ending September 30, 1898, inclusive, was:

Digitized by Google

For construction and extension, . . $56,992 87

Classified as follows:

Cast iron water pipe	$19,114 87	
Laying water pipes	12,745 55	
Stop valves	3,693 85	
Laying service pipes	3,319 35	
Special water service for fire protection	3,145 44	
Fire hydrants, boxes and covers	3,121 28	
Special castings	3,043 99	
Service pipe	1,587 81	
Tools	1,333 58	
Patterns for special castings	1,198 38	
Labor on and carting pipe	1,165 60	
Barn expenses	923 24	
Taps and stops	894 46	
Wharf salaries	801 43	
Repairs on pipe yard buildings	491 59	
Horses, wagons, harnesses, etc	276 81	
Holly high-duty compound engine at Hope station, to erect	100 00	
Sundries	35 64	
	$56,992 87	

For Maintenance, ... $84,123 76

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$7,223 57	
Sundries	4,220 93	
Engineers	2,107 08	
Firemen	1,685 30	
Superintendence	1,199 28	
Care of grounds	460 98	
Oil, waste, and packing	266 47	
Barn expenses	197 67	
Labor on fuel	180 25	
Cornish pumping engine	150 40	
Worthington high-duty pumping engine	60 96	
Lights	30 82	
Cornish engine house	21 98	
Real estate	21 42	
Corliss pumping engine and house	2 50	
		$17,829 61

SOCKANOSSET RESERVOIR.

Watchman	$730 00	
Sundries	373 71	
		1,103 71
Amount carried forward		$18,933 32

Digitized by Google

Amount brought forward		$18,933 32

Hope Pumping Station.

Coal and wood	$2,612 50	
Firemen	1,679 00	
Engineers	1,199 28	
Care of grounds	328 00	
Lights	274 47	
Repairs on boilers	248 07	
Sundries	218 89	
Holly pumping engine	73 82	
Oil, waste, and packing	43 33	
		6,677 36

Hope Reservoir.

Watchman	$821 25	
Sundries	657 83	
		1,479 08

Fruit Hill Reservoir.

Sundries	$1,547 17	
Watchman	821 25	
		2,368 42

Pipe Line and Service Stops.

Repairs	$13,038 68	
Superintendence — salaries	3,386 91	
		16,425 59

Meter Department.

Water meters	$14,567 78	
Setting and repairing meters	6,080 73	
		20,648 51

Miscellaneous.

Town of Cranston, tax	$6,178 43	
Clerks' and inspectors' salaries	5,723 81	
Prevention of defilement of the Pawtuxet	1,866 64	
Barn expenses	1,097 49	
Horses, wagons, harnesses, etc.	732 35	
Telephone lines	551 96	
Town of North Providence, tax	400 00	
Analyses of water	375 00	
Sundries	247 21	
Pipe yard, office expenses	164 18	
Public drinking fountains and troughs	116 91	
Real estate at Pawtuxet	82 50	
Town of Lincoln, tax	55 00	

Digitized by Google

SEWERS.

During the quarter ending September 30, 1898, four hundred and forty-two permits were issued to drain layers — two hundred and fifty-eight for new work, and one hundred and eighty-four for extension and repairs of drains.

One drain layer's license was issued during the quarter, making the total number fifty, all of which expire December 31, 1898.

July 11th, a contract for the construction of the following sewer was awarded, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To William H. Sherman.

No. of resolution.	Date of approval.		
274.	July 8, 1898,	*Slocum street, from near Almy to Harkness,*	$338 03

July 12th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
190.	May 20, 1898,	*Mill street, east side, from North Main to Bark,*	$354 60

August 5th, a contract for the construction of the following storm sewer was awarded and subsequently executed, namely:

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
308.	Aug. 5, 1898,	*Benefit, Star, North Main and Canal streets,*	$561 50

Digitized by Google

Sept. 2nd, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

TO JAMES J. NEWMAN.

No. of resolution.	Date of approval.		
261.	July 8, 1898,	*Plainfield street and Olneyville square,*	$6,024 39

TO FREDERICK E. SHAW.

211.	June 10, 1898,	*Parnell street, from its northerly termination to Atwells avenue,*	$1,855 30
260.	July, 8, "	*Manton avenue, from Erastus street to King, and from Sisson to Unit,*	2,251 70
309.	Aug. 5, "	*Back and Lock streets,*	1,129 20

Sept. 29th, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

TO WILLIAM H. SHERMAN.

No. of resolution.	Date of approval.		
354.	Sept. 23, 1898,	*Lester street, from Gilmore to Bridgham,*	$342 10

During the quarter, the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
394.	Oct. 5, 1897,	*Broad and Rugby streets,*	Aug. 18, 1898.
416.	" 26, "	*Columbian avenue and Roger Williams Park,*	Sept. 15, 1898.
152.	May 3, 1898,	*Baker street, from Eddy to Broad,*	July 6, [illegible]

Digitized by Google

No. of resolution.	Date of approval.				Date of completion.
155.	May	3,	1898,	*Trenton street, from Ives to Gano,*	July 20, 1898.
156.	"	"	"	*Washburn and Common streets,*	Aug. 6, 1898.
274.	July	8,	"	*Slocum street, from near Almy to Harkness,*	July 26 1898.
308.	Aug.	5,	"	*Benefit, Star, North Main and Canal streets.*	Sept. 10, 1898.

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
406.	July	15,	1889,	*Section 2, Sewage Precipitation Tanks, Improved Sewerage System.*
572.	Dec.	20,	1895,	*Section 21, Moshassuck Division, Improved Sewerage System.*
572.	"	"	"	*Section 22, Moshassuck Division, Improved Sewerage System*
202.	May	20,	1898,	*Section 23, Woonasquatucket Division, Improved Sewerage System.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
211.	June	10,	1898,	*Parnell street, from its northerly termination to Atwells avenue.*
261.	July	8,	"	*Plainfield street and Olneyville square.*
309.	Aug.	5,	"	*Back and Lock streets.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced September 30, 1898, namely:

Digitized by Google

No. of resolution.	Date of approval.	
190.	May 20, 1898,	*Mill street, east side, from North Main to Bark.*
260.	July 8, "	*Manton avenue, from Erastus to King, and from Sisson to Unit.*
354.	Sept. 23, "	*Lester street, from Gilmore to Bridgham.*
357.	" 26, "	*Brayton avenue and across land of the N. Y., N. H. and H. R. R. Co.*
358.	" " "	*West Exchange and Gaspee streets.*

The amount of bills approved on account of sewers from July 1 to September 30, 1898, inclusive, was as follows:

FOR CONSTRUCTION.

Regular appropriation	$19,005 72	
Improved sewage appropriation	64,622 94	
		$83,628 66

Charged as follows:

Material	$10,232 48
Salaries of assistant engineers	600 00
Additional catch-basins	309 46
Testing cement	296 88
Sundries	201 30
Sundries, improved sewerage system	12 95
Tools	1 50
Sewer in Back and Lock streets	1,407 31
Sewer in Bacon, North Main, Randall, and Printery streets	207 75
Sewer in Baker street, from Eddy to Broad	803 21
Sewer in Broad street, east side, from Berkely to end of sewer in Potters avenue	202 24
Sewer in Broad and Rugby streets	3,159 26
Sewer in Chaffee street, from Appleton to Manton avenue	259 00
Sewer in Columbian avenue and Roger Williams Park	3,413 66
Sewer in Parnell street, from its northerly termination to Atwells avenue	104 19
Sewer in Plainfield street and Olneyville square	12 25
Sewer in Public street, from Eddy to Allens avenue	558 65
Amount carried forward	$21,781 09

Digitized by Google

Amount brought forward	$21,781 69	
Sewer in Sayles street, from Ocean to Plain	109 45	
Sewer in Slocum street, from Almy to Harkness	383 33	
Sewer in Trenton street, from Ives to Gano	1,036 81	
Sewer in Washburn and Common streets	964 09	
Surface sewer in Wickenden and Gano streets	605 43	
Culvert across Allens avenue at Old Maids cove	2,186 90	
Sewer in Moshassuck Division, Section 20	7 58	
Sewer in Moshassuck Division, Section 21	23,175 34	
Sewer in Moshassuck Division, Section 22	40 00	
Sewer in Woonasquatucket Division, Section 23	12,336 68	
Sewage precipitation tanks — to build	21,000 96	
		$83,628 66

For maintenance, ... $27,962 94

Charged as follows:

Cleaning basins and sewers	$15,573 82
Repairing basins and sewers	3,038 03
Cleaning and repairing old drains	1,225 26
Tools	1,108 49
Storm sewer in Benefit and Star streets	1,009 25
Inspection of connections	728 36
Salary—superintendent	471 14
Barn expenses	360 58
Sundries	341 89
Horses, wagons, harnesses, etc.	308 05
Filling cisterns, etc.	89 09
Telephone lines	70 71
Office expenses	40 66
Cleaning private connections	40 00
Repairs on gate houses	21 95
Repairs on buildings at sewer maintenance yard	13 45

ERNEST STREET STATION.

Engineers	$813 24
Coal and wood	659 92
Cleaning screens	564 07
Firemen	438 00
Supplies	326 96
Cleaning and repairing pumps	242 28
Care of grounds	196 06
Care of buildings	139 57
Repairs on buildings	65 33
Lights	38 01
Repairs on engines	31 57
Repairs on boilers	7 20
	$27,962 94

Digitized by Google

The *net* expenditure for construction of sewers to September 30, 1898, inclusive, was $6,208,137 77

The *net* expenditure for maintenance of sewers to September 30, 1898, inclusive, was $599,389 19

Bills deposited with the city treasurer for collection from July 1 to September 30, 1898, inclusive, amounted to . . . $722 90

As follows:

Extinguishing fire at Bowdoin street dump.....	$168 48	
Filling cisterns, etc.....	78 45	
Cleaning private connections.....	31 25	
Old manhole frames and covers.....	7 44	
Building retaining wall—Section 20.....	232 86	
Sewer material.....	172 32	
Laying drains to curbstones.....	32 10	
	$722 90	

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $832 19

As follows:

Extinguishing fire at Bowdoin street dump.....	$168 48	
Rebuilding sewer in Fulton street.....	109 29	
Filling cisterns, etc.....	78 45	
Cleaning private connections.....	31 25	
Old manhole frames and covers.....	7 44	
Building retaining wall—Section 20.....	232 86	
Sewer material.....	172 32	
Laying drains to curbstones.....	32 10	
	$832 19	

The amount of bills approved on account of sewers for the fiscal year ending September 30, 1898, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation.....	$58,909 24	
Improved sewerage appropriation.....	134,770 52	
		$193,679 76

Digitized by Google

Charged as follows:

Material	$27,471 86
Salaries of assistant engineers	10,214 77
Contract reservations	3,425 00
Sundries	1,318 31
Testing cement	848 49
Additional catch-basins	695 60
Sundries, improved sewerage system	678 54
Experiments in filtration at Ernest street station	230 83
Patterns for sewer castings	225 00
Tools	32 96
Sewer in Atwells avenue, from Woonasquatucket river to Valley street	693 44
Sewer in Babbitt street, from Black to Quaid	603 91
Sewer in Bacon, North Main, Randall, and Printery streets	6,496 39
Sewer in Back and Lock streets	1,407 31
Sewer in Baker street, from Eddy to Broad	1,537.80
Sewer in Blackstone boulevard, east side, from President avenue westerly about 150 feet	209 30
Sewer in Broad street, east side, from Buckley to end of sewer in Potters avenue	619 06
Sewer in Broad and Rugby streets	3,159 26
Sewer in Chaffee street, from Appleton to Manton avenue	1,148 58
Sewer in Chalkstone avenue, from near Claremont street to Winthrop	1,110 99
Sewer in Chalkstone avenue, from North Davis street to Douglas avenue	1,356 33
Sewer in Columbian avenue and Roger Williams Park	3,413 66
Sewer in Doyle avenue, from near East to Elmgrove	153 50
Sewer in Garden street, from Jackson about 140 feet westerly	359 92
Sewer in Halsey street, from near Prospect to Brown	793 16
Sewer in Parnell street, from its westerly termination to Atwells avenue	104 19
Sewer in Peace street, from summit west of Broad to Elmwood avenue	1,074 99
Sewer in Plainfield street and Olneyville square	12 25
Sewer in Prospect street, from Barnes to Halsey	362 85
Sewer in Public street, from Eddy to Allens avenue	2,600 17
Sewer in Sayles street, from Ocean to Plain	799 87
Sewer in Slocum street, from Almy to Harkness	383 33
Sewer in Smith street, from Elmhurst to McCaughin	1,230 14
Amount carried forward	$74,771 76

Digitized by Google

Amount brought forward	$74,771 76
Sewer in South Angell street and Butler avenue	1,407 34
Sewer in Trenton street, from Ives to Gano	1,036 81
Sewer in Washburn and Common streets	964 09
Sewer in Waterman street, from near Wayland avenue to Butler	1,176 52
Sewer in Wayne, Danforth, and Mathew streets	1,485 61
Surface sewer in Wickenden and Gano streets	605 43
Building roadway from Ernest street station to precipitation tanks	775 79
Carriage shed at Ernest street station — to build	242 97
Connecting lateral sewers with improved sewerage system	1,312 04
Culvert across Allens avenue at Old Maids cove	2,186 90
Grading grounds at Ernest street station	2,610 79
Granite steps for Ernest street station	1,265 00
Sewer in Disposal Division, Section 4	132 01
Sewer in Manton avenue and King street	2,988 56
Sewer in Moshassuck Division, Section 20	22,696 53
Sewer in Moshassuck Division, Section 21	28,964 99
Sewer in Moshassuck Division, Section 22	40 00
Sewer in Woonasquatucket Division, Section 23	17,759 29
Sewage precipitation tanks — to build	31,222 38
Supplies for sewage pumping station	34 95
	$193,679 76

For maintenance, ... $66,136 41

Charged as follows:

Cleaning basins and sewers	$26,587 46
Repairing basins and sewers	12,508 58
Cleaning and repairing old drains	2,927 97
Inspection of connections	2,498 58
Tools	2,297 73
Salary — superintendent	1,707 71
Barn expenses	1,468 17
Storm sewer in Benefit and Star streets	1,009 25
Sundries	947 97
Horses, wagons, harnesses, etc	783 18
Filling cisterns, etc	178 49
Office expenses	158 19
Cleaning private connections	137 70
Telephone lines	70 71
Repairs on buildings at sewer maintenance yard	62 65
Repairs on gate houses	23 33
Amount carried forward	$53,367 67

Digitized by Google

Amount brought forward	$53,367 67

ERNEST STREET STATION.

Engineers	$2,924 13
Cleaning screens	2,131 05
Coal and wood	1,921 82
Firemen	1,698 80
Supplies	1,641 20
Cleaning and repairing pumps	1,020 70
Repairs on engines	342 80
Care of grounds	335 27
Lights	255 34
Care of buildings	207 18
Repairs on buildings	160 41
Repairs on boilers	130 04
	$66,136 41

HIGHWAYS.

Two permits to open streets were issued during the quarter.

August 4th, curbing bills were certified to the assessors of taxes amounting to $7,948.92.

September 9th, the proposal of Joseph Newall & Co. to furnish and deliver one hundred thousand granite paving blocks, was accepted.

September 14th, the proposal of James B. Hogan for tearing down the old passenger station building on Exchange place, the contractor to retain all material taken from the building and to pay the city the sum of $500.55, was accepted. A contract was subsequently executed.

During the quarter, the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Francis street, from Cove and Exchange place to Gaspee street.*
" 20, 1897,	*Francis street, from West Exchange to bridge over the Woonasquatucket river.*

Digitized by Google

Date of order.	
July 1, 1897,	*Approaches to new passenger station.*
Sept. 16, "	*Peace street, from Elmwood avenue to Bucklin street.*

The following work was in progress September 30, 1898, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
May 16, 1895,	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street:* — three-fourths completed.
151.	" " "	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.

TO PAVE WITH TRINIDAD ASPHALT.

No. of resolution.	Date of approval.	
322.	July 13, 1897,	*Approaches to new passenger station:* — two-thirds completed.

TO BUILD.

257.	July 8, 1898,	*Exchange place and West Exchange street:* — curbing partially set.

TO REMOVE BUILDING AND GRADE.

320.	Sept. 13, 1898,	*Old passenger station, Exchange place and adjoining lands:* — in process.

Digitized by Google

The following work, ordered by the board of aldermen and city council, had not commenced September 30, 1898, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Nov. 18, 1897,	*Whitmarsh street, from Updike to Elmwood avenue.*
Dec. 16, "	*Arlington avenue, east side, from Irving to University.*
" " "	*Ayrault street, from Valley to Chalkstone avenue.*
" " "	*Black street, from Orms to Chalkstone avenue.*
" " "	*Foster street, from Broad to Pine.*
" " "	*Lexington avenue, from Hamilton street to Broad.*
" " "	*Wayne street, from Nolan to Candace.*
" " "	*West Park street, from Holden to Senter.*
June 16, 1898,	*Arlington avenue, east side, from University to Lloyd.*
" " "	*Columbian avenue, from Broad street to Roger Williams Park.*
Sept. 15, 1898,	*Canal street extension and Mill street.*
" " "	*Power street, from Governor to Ives.*
" " "	*Irving street, from Emerson to Broad.*

To Put in Good Condition.

Sept. 16, 1897,	*Irving avenue, from Grotto to its easterly termination.*

To Build and Curb.

No. of resolution.	Date of approval.	
350.	Sept. 23, 1898,	*Whitmarsh street, from Updike to Elmwood avenue.*
350.	" " "	*Arlington avenue, east side, from Irving to University.*

Digitized by Google

No. of resolution.	Date of approval.	
350.	Sept. 23, 1898,	*Ayrault street, from Valley to Chalkstone avenue.*
350.	" " "	*Black street, from Orms to Chalkstone avenue.*
350.	" " "	*Lexington avenue, from Hamilton street to Broad.*
350.	" " "	*Wayne street, from Nolan to Candace.*
350.	" " "	*West Park street, from Holden to Senter.*
350.	" " "	*Arlington avenue, east side, from University to Lloyd.*
350.	" " "	*Columbian avenue, from Broad street to Roger Williams Park.*

TO PAVE WITH GRANITE BLOCKS.

351.	Sept. 23, 1898,	*Canal street extension and Mill street.*

TO PAVE WITH ASPHALT.

352.	Sept. 23, 1898,	*Mathewson street, from Westminster to Weybosset.*
353.	" " "	*Washington street extension, from West Exchange to near Exchange bridge.*

Bills approved on account of highways from July 1 to September 30, 1898, inclusive, amounted to:

Regular appropriation	$42,446 68	
Special appropriation	2,462 13	
Special credit appropriation	881 48	
		$45,790 29

Classified as follows:

Cleaning streets	$18,753 51
Crushed stone—material and labor	7,232 58
Repairs on unpaved streets	5,921 64
Amount carried forward	$31,907 73

Digitized by Google

Amount brought forward	$31,907 73	
Barn expenses	2,274 26	
Blacksmith and wheelwright shop	2,196 58	
Repairs on paved streets	1,534 67	
Repairs on stone crushers	1,237 14	
Tools, implements, etc	766 39	
Steam rollers—repairs and supplies	514 79	
Salaries—superintendent and clerks	471 14	
Labor on material	345 93	
Building driveways, etc	300 93	
Horses, wagons, harnesses, etc	175 03	
Watering streets	165 54	
Watchman at city yard	142 29	
Stone—paving and crosswalk	138 90	
Fencing streets—material and labor	114 29	
Sundries	104 91	
Office expenses—city yard	34 73	
Telephone lines	21 43	
		$42,446 68

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Peace street, from Elmwood avenue to Bucklin street		881 48

Pave with Granite Blocks.

Francis street, from Cove and Exchange place to Gaspee street	1,211 98	
Promenade street, from present end of pavement near railroad bridge to Steeple street	89 00	
		1,300 98

Pave with Trinidad Asphalt.

The two approaches to the proposed depot in Exchange place		1,161 15
		$45,790 29

Bills deposited with the city treasurer for collection, from July 1 to September 30, 1898, inclusive, amounted to . . $7,358 57

Digitized by Google

As follows:

Union Railroad Company, for granite blocks, etc...	$5,961 47	
Labor and material	642 47	
Blacksmith and harness work for other departments	331 27	
Old iron	176 86	
Street sweepings	154 00	
Manure from barn	72 00	
Use of hoisting engine	7 50	
Use of plow	7 00	
Removing trees	6 00	
	$7,358 57	

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $7,559 94

As follows:

Union Railroad Company, for granite blocks, etc...	$6,073 04
Labor and materials	449 07
Blacksmith and harness work for other departments	326 51
Street sweepings	227 63
Boarding horses for other departments	221 83
Old iron	176 86
Manure from barn	72 00
Use of plow	7 00
Removing trees	6 00
	$7,559 94

Bills approved on account of highways for the fiscal year ending September 30, 1898, inclusive, amounted to:

Regular appropriation	$215,859 21	
Special appropriation	3,503 72	
Special credit appropriation	12,193 45	
		$231,556 38

Classified as follows:

Cleaning streets	$56,160 94
Crushed stone — material and labor	47,741 62
Amount carried forward	$103,902 56

Digitized by Google

Amount brought forward	$103,902 56	
Repairs on unpaved streets	36,325 40	
Removing snow and ice	13,778 58	
Repairs on paved streets	12,857 34	
Blacksmith and wheelwright shop	9,648 33	
Barn expenses	8,871 06	
Steam rollers — repairs and supplies	4,856 52	
Tools, implements, etc	4,441 50	
Repairs on stone crushers	3,175 84	
Labor on material	2,990 92	
Stone — paving and crosswalk	2,670 82	
Salaries — superintendent and clerks	1,772 85	
Horses, wagons, harnesses, etc	1,461 96	
Building driveways, etc.	930 01	
Watchman at city yard	601 72	
Sundries	407 83	
Watering streets	325 38	
Office expenses, city yard	185 73	
Fencing streets — material and labor	178 83	
Telephone lines	21 43	
		$209,404 61

New Work — Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Andem street, from Academy avenue to Canton street	$10 00	
Brownell street, from Park to Francis	57 45	
Eddy street, west side, from Broad to Morton, and on east side from Broad to New York avenue	1 14	
Irving avenue, from Taber to Blackstone boulevard	6,878 30	
Lisbon street, from Chalkstone avenue to Regent	59 71	
Milk street, from Chester avenue to Public street	24 54	
Miner street, from Potters avenue to Sayles street	1,974 93	
Osborn street, from Vale to Chalkstone avenue	67 48	
Peace street, from Elmwood avenue to Bucklin street	1,539 63	
Power street, from Ives to Gano	1,943 80	
Roger street, from Power to Williams	820 34	
		13,377 32

Pave with Granite Blocks.

Francis street, from Cove and Exchange place to Gaspee street	$1,373 98	
Promenade street, from present end of pavement near railroad bridge to Steeple street	89 00	
		1,462 98
Amount carried forward		$224,244 91

Digitized by Google

Amount brought forward		$224,244 91
PAVE WITH TRINIDAD ASPHALT.		
The two approaches to the proposed depot in Exchange place		1,903 55
PAVE WITH GRANITE BLOCKS AND COBBLE.		
Eddy street, from Henderson to Public		84 64
GRADE AND PUT IN GOOD CONDITION.		
Allens avenue, from Public street to Henderson	$398 86	
Montgomery avenue, from Virginia to Maryland, and *Alabama avenue*, from Maryland to Montgomery	2,988 53	
		3,387 39
TO PUT IN GOOD CONDITION.		
Irving avenue, from Grotto to its easterly termination		330 85
TO TAKE POSSESSION.		
Canal street, from Smith to Mill		881 53
TO REPAIR.		
Sprague street, from Elmwood avenue to Dexter street		723 51
		$231,556 38

SIDEWALKS AND CURBING.

Bills approved on account of sidewalks and curbing from July 1 to September 30, 1898, inclusive, amounted to $10,932 74

Charged as follows:

Repairing sidewalks and gutters	$5,053 87
Concreting sidewalks	4,562 82
Granite curbing	1,316 05
	$10,932 74

Bills deposited with the city treasurer for collection from July 1 to September 30, 1898, inclusive, amounted to $658 32

Digitized by Google

As follows:

Curbing bills	$644 07
Discharging cargoes of curbing at city wharf	14 25
	$658 32

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $1,361 35

As follows:

Curbing bills	$1,347 10
Discharging cargoes of curbing at city wharf	14 25
	$1,361 35

The expenditures on account of sidewalks and curbing for the fiscal year ending September 30, 1898, inclusive, amounted to . . . $17,795 89

Charged as follows:

Concreting sidewalks	$9,294 31
Repairing sidewalks and gutters	5,053 87
Granite curbing	3,447 71
	$17,795 89

CITY ENGINEER.

Bills approved on account of the city engineer's department from July 1 to September 30, 1898, inclusive, amounted to $15,390 68

Charged as follows:

Salary—city engineer	$1,125 00
Salaries of assistants	12,356 26
Salaries of clerks	814 10
Instruments and repairs	493 96
Supplies—drawing material, etc	373 38
Car fares	204 93
Telephone lines	10 71
Sundries	10 56
Carriage hire	1 78
	$15,390 68

Digitized by Google

Bills deposited with the city treasurer for collection from July 1 to September 30, 1898, inclusive, for set of sewer diagrams, amounted to . $4 50

During the quarter, coupons from bills collected, for set of sewer diagrams sold, have been returned by the city treasurer and receipted for to the amount of $4 50

Bills approved on account of the city engineer's department for the fiscal year ending September 30, 1898, inclusive, amounted to . . . $47,998 78

Charged as follows:

Salary—city engineer	$4,500 00
Salaries of assistants	37,651 19
Salaries of clerks	3,063 38
Supplies—drawing material, etc	1,172 74
Car fares	933 83
Instruments and repairs	595 61
Sundries	56 04
Meteorological instruments and repairs	13 50
Telephone lines	10 71
Carriage hire	1 78
	$47,998 78

BRIDGES.

July 12th, the proposal of E. A. Card, of Groton, Conn., to furnish and deliver chestnut or oak piles for rebuilding crib-work at the Point street bridge, was accepted and a contract subsequently executed.

July 12th, the proposal of William M. Harris to furnish and deliver about 118,000 feet, B. M., yellow pine lumber for the crib-work at the Point street bridge, was accepted.

July 27th, the proposal of John T. Tank to extend the contract for building the Weybosset bridge piers and abutments so as to include the extension of the easterly pier northerly to meet the Burnside bridge pier, was accepted.

Digitized by Google

August 16th, the proposal of John A. Dailey to furnish tools and labor for building the crib-work, fender piling, and dolphins, for the Point street bridge, was accepted and a contract subsequently executed.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
158.	April 20, 1897,	*Weybosset bridge and river walls.*
187.	May 20, 1898,	*Weybosset bridge extension.*

Bills approved on account of bridges from July 1 to September 30, 1898, inclusive, amounted to $7,397 78

Charged as follows:

Barn expenses	$90 23
Building at city yard	42
Burnside bridge	6 67
Charles street bridge	1 58
Eagle street bridge	2 10
Francis street bridge	10 50
Horses, wagons, harnesses, etc	55 70
Lumber, hardware, etc	20 38
Park street bridge	1 40
Point street bridge	3,423,63
Red bridge	373 52
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	1,084 75
Salaries—Red bridge	550 00
Salaries—Washington bridge	512 72
Sundries	61 91
Tar bridge—Manton avenue	230 85
Telephone lines	10 72
Tools	31 70
Veazie street bridge	1 10
Washington bridge	645 59
Washington row bridge—to repair	38 69
Washington row bridge—to rebuild	213 62
	$7,397 78

Digitized by Google

Bills deposited with the city treasurer for collection from July 1 to September 30, 1898, inclusive, amounted to $16 16

As follows:

Cement barrels	$14 16	
Old lumber	2 00	
	$16 16	

During the quarter, coupons from bills collected, for old lumber sold, have been returned by the city treasurer and receipted for to the amount of $2 00

Bills approved on account of bridges for the fiscal year ending September 30, 1898, inclusive, amounted to $19,641 05

Charged as follows:

Acorn street bridge	$51 44
Atwells avenue bridge	3 87
Barn expenses	366 87
Branch avenue bridge	14 80
Building at city yard	17 44
Burnside bridge	43 74
Charles street bridge	24 43
Delaine street bridge	2 30
Eagle street bridge	9 14
Exchange bridge	131 74
Francis street bridge	10 50
Gaspee street bridge	71 17
Geneva bridge	102 28
Horses, wagons, harnesses, etc	109 74
Lumber, hardware, etc	87 24
Mill street bridge	11 35
Park street bridge	5 27
Point street bridge	5,871 54
Randall street bridge	25 70
Red bridge	812 93
Rent of keeper's house, Washington bridge	120 00
Salaries—Point street bridge	3,965 75
Amount carried forward	$11,859 24

Digitized by Google

Amount brought forward	$11,859 24
Salaries—Red bridge	2,037 50
Salaries—Washington bridge	1,945 37
Smith street bridge	21 29
Smithfield avenue bridge	3 98
Stevens street bridge	12 45
Sundries	615 95
Tar bridge—Manton avenue	230 85
Telephone lines	10 72
Tools	440 39
Valley street bridge—north span	2 30
Veazie street bridge	118 72
Wanskuck bridge	21 67
Washington bridge	2,030 84
Washington row bridge—to rebuild	213 62
Washington row bridge—to repair	38 69
Whelden street bridge	26 22
Weybosset bridge	11 25
	$19,641 05

Bills approved for account of rebuilding the Weybosset bridge and river walls, have been paid from the special appropriation for that work, as follows:

From October 1, 1897, to June 30, 1898	$93,566 42	
From July 1, 1898, to September 30, 1898	47,906 00	
		$141,472 42

PUBLIC WORKS OFFICE.

Bills approved on account of the public works office, from July 1 to September 30, 1898, inclusive, amounted to $5,241 20

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	3,076 53
Office supplies	227 32
Telephone lines	10 72
Carriage hire	1 63
	$5,241 20

Digitized by Google

Bills approved on account of the public works office for the fiscal year ending September 30, 1898, inclusive, amounted to . . . $20,161 08

Charged as follows:

Salaries of commissioner and secretary	$7,700 00
Salaries of office assistants	11,746 07
Office supplies	702 66
Telephone lines	10 72
Carriage hire	1 63
	$20,161 08

CONTINGENCIES.

Bills approved for account of contingencies for the fiscal year ending September 30, 1898, inclusive, amounted to $854 20

Charged as follows:

Grading and fencing new city yard	$840 87
Removing old passenger station and grading adjoining lands	13 33
	$854 20

ROBERT E. SMITH,

Commissioner.

Digitized by Google

Digitized by Google

SIXTY-FOURTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1898.

72367

The Providence Press:
Snow & Farnham, City Printers.
5 Custom House Street.
1899.

Digitized by Google

Digitized by Google

SIXTY-FOURTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1898.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1899.

Digitized by Google

THE NEW YORK
PUBLIC LIBRARY
P 72367
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1900.

Digitized by Google

REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., Jan. 1, 1899.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the sixty-fourth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same, for the quarter ending Dec. 31, 1898:

WATER WORKS.

November 29th, the proposal of The Congdon & Carpenter Company to furnish and deliver 20,000 pounds of lead pipe, various sizes, and 500 pounds of pig tin, was accepted. Amount $1,053.75.

November 30th, the proposal of Macauley Brothers to furnish and deliver 24,000 pounds ⅝-inch lead pipe, was accepted. Amount $1,128.00.

December 1st, the proposal of the General Fire Extinguisher Company to furnish and deliver 500 service box covers, was accepted.

December 1st, the proposal of John W. Lyon to furnish and deliver taps, stops, and plugs, was accepted.

Digitized by Google

December 21st, the proposal of Builders Iron Foundry to furnish special castings for the Water and Sewer Departments for the year 1899, was accepted.

December 21st, the proposal of Warren Foundry and Machine Company, Phillipsburg, N. J., to furnish and deliver about two hundred and sixty-eight tons of cast iron water pipes, for the sum of $18.40 per gross ton, was accepted.

December 29th, the proposal of Coffin Valve Company to furnish and deliver various sizes of water gates, was accepted. Amount $1,050.00.

December 30th, the proposal of the Pomroy Coal Company to furnish the teams required for teaming at the city pipe yard during the year 1899, was accepted.

The average daily consumption of water during the last quarter was 9,113,610 gallons, and the average daily consumption for the year 1898 was 9,148,993 gallons.

Water pipes were laid during the quarter as follows:

8-INCH.	
In Columbia avenue	2,104.02 feet.
6-INCH.	
In approach to new passenger station; Alicant, Amherst, Canal, Chatham, Clay, David, Danforth, Duffy, Fisk, King, Mary, Minnie, Vale, Veto, and West Park streets; Columbia and Sawin avenues; in Appleton and Clarence streets; Grand, Hawthorne, Princess, and Tucker avenues, in town of Cranston	4,430.60 feet.
Total	6,534.62 feet.

or, 1.237 + mile.

Water pipes were removed or abandoned during the quarter, as follows:

6-INCH.	
From east approach to N. Y., N. H. & H. R. R. station	50.13 feet.

or, .009 + mile.

Digitized by Google

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	61,328.30 feet.
24-inch	43,590.79 feet.
20-inch	9,626.59 feet.
16-inch	34,084 95 feet.
12-inch	92,817.16 feet.
10-inch	15,057.14 feet.
8-inch	262,425.96 feet.
6-inch	1,131,696.49 feet.
Total	1,660,711.38 feet.

or, 314.528 + miles.

Statement of sizes and lengths of pipe laid for the Special Water Service for Fire Protection, since the commencement of the work:

24-inch	4,188.58 feet.
16-inch	23,004.37 feet.
12-inch	2,215.76 feet.
Total	29,408.71 feet.

or, 5.569 + miles.

Fourteen fire hydrants have been set during the quarter, one in each of the following locations:

Approach to new depot, near the river, south side, 147 feet west of west building line of Washington street.

Atwood street, east side, 205 feet north of McDonough.

Burrington street, at northwest corner of Dexter.

Clay street, southwest corner of Crary.

Chatham street, northeast corner of Ashton.

Chatham street, east side, 2.5 feet south of south building line of Denison.

Columbia avenue, north side, 267 feet east of east line of Cactus street.

Columbia avenue, north side, 273 feet east of east line of Roger Williams Park.

Eastwood avenue, north side, 182 feet west of Webster.

Laurel Hill avenue, east side, about 16 feet south of Bend street.

Mary street, southwest corner of Crary.

Ralph street, east side, about 173 feet north of Dorchester avenue.

Seamans street, east side, 176.5 feet north of Augusta.

Webster avenue, east side, about one foot north of Dora street.

Digitized by Google

The total number of fire hydrants, exclusive of hydrants for special service for fire protection, is now eighteen hundred and fifteen — seventeen hundred and thirty-nine flush, and seventy-six post hydrants.

One fire hydrant was set during the quarter, on special water service for fire protection, at the following location:

West Exchange street, middle of street, 90.5 feet west of west building line of Washington street, and 28.5 feet north of south curb line of West Exchange street.

The total number of fire hydrants on the special water service for fire protection is ninety-one.

During the quarter two hundred and twenty water meters were set, of which number sixty-six were to replace other meters. The use of twelve meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½ in.	2-in.	3-in.	4-in.	6	
Ball & Fitts, piston	3,128	617	147	22	7	.....	.....	.....	3,921
Ball & Fitts, rotary	.....	.....	11	15	1	3	2	.....	32
Crown	7,618	792	244	111	27	16	17	.....	8,825
Empire	112	17	11	12	3	.....	.....	.....	155
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Gem	.....	.....	.....	.....	4	14	8	1	27
Thomson	2,832	394	76	54	22	7	7	3	3,395
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	1	1	.....	.....	1	.....	1	.....	4
	13,719	1,821	490	214	65	40	35		16,388

Three plumbers' licenses were issued during the quarter, making the total number one hundred and twenty, all of which expired Dec. 31, 1898.

Digitized by Google

Seven hundred and sixty-eight permits to do plumbing work were issued during the quarter.

One hundred and thirty applications for water were made during the quarter, making the total number December 31, 1898, twenty-two thousand nine hundred and sixty-seven.

The number of new service stops opened during the quarter was one hundred and thirty-six.

The total number of service stops opened to December 31, 1898, inclusive, was twenty-two thousand two hundred and ninety-nine. The number in actual use December 31, 1898, was twenty thousand four hundred and seventy-three.

The following is a list of drinking troughs supplied with water by the Providence Water Works, viz.:

Angell street, junction of South Angell.
Atwells avenue, junction of Harris.
Bassett street, off of Hospital.
Branch avenue and Abbott street.
Broad street, junction of Eddy.
Broadway, junction of Westminster street.
Charles street, corner of Back.
Charles street and Branch avenue.
Chalkstone avenue, junction of Manton.
Chalkstone avenue, opposite Academy.
Douglas avenue and Chalkstone.
Douglas avenue and Admiral street.
Dyer street, near Crawford street bridge.
Dyer street, junction of Eddy.
Elmwood avenue and Public street.
Federal street, junction of Kenyon.
Fountain street, junction of Carpenter.
Hartford avenue, junction of old Killingly road.
Manton avenue, junction of Atwells.
Miller avenue, (Roger Williams Park).
North Main street, junction of Benefit.
Plainfield street, junction of Pocasset avenue.
Prairie avenue, junction of Broad street.
Point street, junction of Friendship.
Point street, near the bridge.
Potters avenue, corner of Cranston street.
Randall square.
Reservoir avenue, junction of Pontiac street.
Rochambeau avenue, east of Blackstone boulevard.

Digitized by Google

Smith street, junction of Chalkstone avenue.
South Main street, junction of Wickenden.
Thayer street, junction of Hope.
Trinity square.
Waterman street, corner of East River.
Westminster street, junction of Cranston.
West Exchange street, near Exchange place.
Weybosset street, near Mathewson.
Wickenden street, corner of Governor.

TOWN OF CRANSTON.

Cranston street, junction of Phenix road.
Park avenue, corner of Doric.

TOWN OF JOHNSTON.

Manton avenue, near Killey.

The following is a list of street sprinklers ready for use on the Providence Water Works, viz.:

Aborn street, near junction of Atwells avenue.
America street, near Atwells avenue.
Barton street, corner of Broadway.
Bradford street, near Broadway.
Branch avenue, near junction of North Main street.
Benefit street, foot of Angell.
Benefit street, between North Main and Halsey.
Beacon avenue, near Friendship street.
Broad street, near Gallup.
Broadway, north side, west of Harris avenue.
Camp street, between Cypress and Larch.
Cranston street, east side of railroad bridge.
Crary street, between Eddy and Hospital.
Codding street, near Westminster.
Daniel avenue, near Plainfield street.
Dexter street, opposite Division.
Doyle avenue, near East avenue.
Doyle avenue, near North Main street.
Exchange place, west end.
Governor street, near Waterman.
Harris avenue, near Atwells.
Hope street, junction of Thayer.
Hope street, corner of Wickenden.
John street, corner of Benefit.
Knight street, corner of Grove.
Laurel Hill avenue, near Plainfield street.
Linden street, near Broad.
Manning street, near Brook.
Medway street, east of Wayland avenue.
Melrose street, near south corner of burying ground.
Moore street, corner of Broad.

Digitized by Google

North Main street, corner of Thomas.
North Main street, near Mill.
Oakland street, corner of Elmwood avenue.
Olive street, east of Prospect.
Olney street, near Camp.
Orms street, near Back.
Oxford street, corner of Eddy.
Paine street, between Cranston and Messer.
Pocasset avenue, near Plainfield street.
Potter street, near Pine.
Power street, west of Hope.
Promenade street, west of Gaspee.
Promenade street, west of Holden.
Prospect street, corner of Bowen.
Public street, about 200 feet east of Temple.
Reservoir avenue, opposite Atlantic.
Roger Williams Park, near Broad street, (private).
Salem street, between Potters avenue and Lilac street.
Smith street, near Oakland avenue.
Smith street, near Schaffer.
Smithfield avenue, north of Branch.
Smithfield avenue, north of the Moshassuck river.
Smithfield avenue, north of the railroad bridge.
Transit street, between South Water and South Main.
Washington street, corner of Dean.
West Friendship street, near Broad.
Weybosset street, opposite Abbott Park place.
Willard avenue, west of Prairie.
Willow street, west of Messer.
Winter street, near Pond.

The following is a list of drinking fountains, namely:

Atwells avenue, corner of Academy.
Benefit street, corner of College.
Broadway, junction of Westminster street.
Canal street, corner of Steeple.
Candace street, corner of Orms.
Cranston street, junction of Westminster.
Dyer street, corner of Crawford.
Jackson street, corner of Westminster.
Lockwood street, corner of Plain.
North Main street, near Mill.
Prairie avenue, opposite Comstock.
Point street, corner of Eddy.
Potters avenue, corner of Elmwood.
Richmond street, corner of Weybosset.
Stevens street, (Randall square).
Ship street, corner of Dyer.
Spruce street, corner of Tefft.
Westminster street, corner of Dyer.
Wickenden street, corner of Transit.

Digitized by Google

The following table shows the lengths, sizes, etc., of services laid during twenty-two years, ending December 31, 1898:

Years.	Lengths of Services Laid in Feet. Sizes of Pipe. ¼ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	Totals.	Trenching.	Paving.	Taps Used. ½ in.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	Stops Used. ½ in.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	Service Boxes Used.
1877....	2,776.8	8,679.3	1,884.4	248.8	114.2	7.	13,710.5	14,422.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878....	2,209.8	6,881.8	1,436.6	119.4	120.7	35.3	10,803.6	11,365.38	1,659.34	133	427	91	7	13	671	148	464	91	7	12	722	725
1879....	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.40	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880....	2,163.6	5,951.2	1,150.	483.6	186.1	16.9	9,951.4	10,468.87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881....	1,078.9	6,269.4	741.1	253.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882 ...	.....	8,073 8	581.3	226.4	92.	32.	9,005.5	9,481.5	1,020.	....	511	49	17	15	592	....	525	41	15	14	595	610
1883....	9.	8,075.83	761.09	143.	131.9	60.	9,180.82	9,649.5	1,284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884....	.....	8,048.72	732.2	266.3	119.6	23.2	9,190.02	9,715.5	1,054.6	....	512	64	18	17	611	....	539	51	15	13	618	641
1885....	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109.5	....	490	48	11	7	556	1	519	32	5	6	563	586
1886....	23.	7,764.6	699.5	115.4	98.6	25.4	8,726.5	9,213.5	965.5	....	481	64	13	12	570	...	518	49	7	11	585	609
1887....	... .	8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,164.1	....	516	47	11	11	585	...	543	32	7	10	592	612
1888....	.....	7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5	....	495	52	9	10	566	....	519	39	5	10	573	587
1889....	....	9,211.9	514.2	199.	90.2	8.2	10,023.5	10,563.	1,125.5	....	546	53	18	10	627	....	579	37	12	6	634	664
1890....	.....	8,997.8	671.3	194.7	241.6	61.2	10,166.6	10,793.5	1,183.	.. .	549	58	17	16	640	....	586	42	11	15	654	680
1891....	.....	12,531.28	965.5	237.2	311.9	53.5	14,099.38	14,816.	1,445.	....	729	88	30	24	871	....	797	66	18	22	908	944
1892....	.....	14,672.27	1,284.6	152.9	248.8	.....	16,358.57	17,177.	1,945.5	....	858	103	22	17	995	....	943	75	9	17	1,044	1,093
1893 ...	.....	11,153.2	936.5	245.7	248.6	.....	12,584.	13,214.5	1,590.	...	672	81	24	17	794	...	727	65	14	16	822	851
1894....	.....	12,285.2	756.5	391.4	129.2	15.2	13,577.5	14,129.5	1,643.	....	724	59	33	12	828	....	763	47	23	11	844	867
1895....	.....	10,258.5	954.2	142.	189.	.....	11,543.7	12,355.5	1,605.	....	635	68	9	21	733	....	668	56	6	12	742	767
1896....	.....	9,961.3	1,055.7	139.9	159.8	.....	11,316.7	11,981.5	1,364.	....	579	83	14	12	688	....	617	70	12	9	708	726
1897...	.....	9,417.3	786.8	201.8	80.8	.....	10,486.7	11,007.	1,347.5	....	562	53	19	7	641	....	596	45	16	4	661	687
1898....	....	7,653.8	593.7	51.4	91.2	.....	8,390.1	8,753.5	948.	....	435	39	7	11	492	....	470	33	2	8	513	530
Totals..	9,919.9	195,811.88	19,056.89	4,342.3	3,168.8	457.7	232,700.47	245,068.29	29,866.78	612	11,856	1,453	369	296	14,586	645	12,030	1,203	209	259	15,006	15,428

Digitized by Google

The following table shows the lengths, size, etc., of services laid during the year ending December 31, 1898:

Months.	Lengths of Services Laid in Feet.								Taps Used.					Stops Used.					Service boxes used.
	Sizes of Pipe.					Totals.	Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				½ in.	⅝ in.	¾ in.	1 in.	Totals.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	
January	178.6	30.2	.....	.....	.....	208.8	219.	31.	12	1	....	1	14	13	1	....	....	14	15
February	121.2	.....	.....	.....	.....	121.2	126.	3.	6	....	....	....	6	6	....	....	....	6	6
March	798.6	81.6	25.2	.....	.....	905.4	939.	157.	48	5	1	....	54	48	4	1	....	53	55
April	950.2	67.8	.....	34.4	.....	1,052.4	1,103.	78.	55	4	....	2	61	57	4	....	2	63	65
May	991.	60.6	.....	.....	.....	1,051.6	1,099.	106.	56	3	....	....	59	58	3	....	....	61	61
June	852.7	115.2	.....	8.2	.....	976.1	1,019.5	107.	47	6	1	1	55	51	6	....	1	58	59
July	601.8	16.4	26.2	42.6	.....	687.	719.	125.	39	2	1	3	45	39	2	1	3	45	45
August	648.	39.7	.....	.....	.....	687.7	719.	90.	36	1	2	....	39	40	1	....	....	41	43
September	615.4	20.2	.....	.....	.....	635.6	656.	48.	33	2	....	1	36	37	1	....	....	38	40
October	881.7	90.	.....	.....	.....	971.7	1,017.5	86.	50	8	....	1	59	57	5	....	....	62	66
November	592.3	72.	.....	.....	.....	664.3	695.	77.	30	6	2	....	38	38	6	....	....	44	46
December	422.3	.....	.....	6.	.....	428.3	441.5	40.	23	1	....	2	26	26	....	....	2	28	29
Totals	7,653.8	593.7	51.4	91.2	.....	8,390.1	8,753.5	948.	435	39	7	11	492	470	33	2	8	513	530

Digitized by Google

Changes in size and location of services in 1898:

Taps and Stops.										Sizes and Lengths of Lead Pipe.										Trenching.	Paving.	Change in size only.	Change in location only.	Change in both size and location.	Change in length.
Taken Out.					Inserted.					Taken Out.					Inserted.										
¾ inch.	⅝ inch.	½ inch.	¾ inch.	1 inch.	¾ inch.	⅝ inch.	½ inch.	¾ inch.	1 inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.						
122	36	9	4	2	.....	21	17	9	9	1,824.4	595.5	120.2	60.4	42.4	291.9	234.7	181.3	177	.....	3,115	1,437	40	7	9	13

116 services have been removed.

During the year, 97 taps were reported obstructed; 93 were cleaned, and 4 were found unobstructed.

Digitized by Google

The following table exhibits the number of service stops opened each month from the commencement to December 31, 1898:

MONTHS.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
January	....	54	33	21	34	55	15	49	9	20	7	17	15	21	17	18	26	7	39	36	39	56	40	29	30	27	30	40
February	....	47	18	18	7	25	23	18	9	19	3	11	9	10	7	15	7	10	21	25	26	23	24	28	8	28	24	21
March	....	38	34	63	7	45	32	60	19	46	23	39	11	28	9	24	16	14	19	28	24	28	36	40	27	20	42	46
April	....	109	109	108	32	108	82	78	52	58	55	49	55	62	48	68	60	38	61	53	73	76	71	76	67	100	70	53
May	...	224	206	147	162	168	136	95	80	84	66	72	78	62	62	61	70	52	74	66	114	83	91	81	79	98	82	51
June	....	329	295	151	172	148	114	103	71	109	82	48	64	81	81	59	50	86	59	80	83	103	106	105	100	76	86	61
July	....	333	261	127	141	158	83	80	49	75	56	77	66	76	77	83	62	89	74	67	85	105	93	80	89	83	59	51
August	....	224	209	123	83	94	91	51	51	39	58	87	69	61	57	71	49	52	56	76	95	104	115	116	83	64	69	54
September	....	184	147	139	101	94	80	63	44	37	60	67	93	50	70	59	74	63	64	77	93	114	88	112	70	71	67	53
October	....	138	135	160	92	84	81	78	79	48	61	56	47	65	62	52	80	70	64	54	104	102	96	85	90	70	62	47
November	...	100	104	185	86	54	73	57	63	54	37	64	49	51	39	57	69	47	58	72	61	118	80	70	68	52	54	42
December	56	83	45	122	60	35	55	45	47	29	40	27	56	44	46	28	49	42	53	50	83	102	62	62	57	58	53	47
Totals	56	1,863	1,596	1,364	977	1,068	865	777	573	618	548	614	612	611	575	595	612	570	642	684	900	1,014	902	884	768	747	698	566

Digitized by Google

The receipts for water each year since the commencement have been as follows:

Year.	Amount.	Year.	Amount.
1872	$41,003 51	1886	$323,084 67
1873	97,386 09	1887	339,513 60
1874	132,052 39	1888	346,731 58
1875	165,144 71	1889	377,497 97
1876	183,868 73	1890	401,140 86
1877	200,039 39	1891	404,553 84
1878	218,883 33	1892	409,421 21
1879	229,551 78	1893	427,546 51
1880	247,705 06	1894	432,383 97
1881	260,530 87	1895	471,069 97
1882	269,318 77	1896	485,187 33
1883	283,632 89	1897	490,652 47
1884	302,368 36	1898	502,603 10
1885	313,561 21		

The amount of bills approved on account of water works from October 1 to December 31, 1898, inclusive, was:

For construction and extension, . . . $6,968 17

Classified as follows:

Service pipes	$2,090 94
Laying water pipes	1,767 55
Laying service pipes	842 75
Special castings	799 33
Barn expenses	260 64
Test wells at Pettaconset	232 26
Wharf salaries	216 86
Horses, wagons, harnesses, etc	171 20
Patterns for special castings	117 00
Labor on and carting pipe	108 80
Repairs on pipe yard buildings	107 24
Pig lead and tin	97 88
Tools	85 60
Stop valves	70 12
	$6,968 17

Digitized by Google

For maintenance. . . . . [illegible]

Classified as follows:

PETTAQUAMSCUTT PUMPING STATION:

Coal and wood	[illegible]	
Sundries	[illegible]	
Engineers	[illegible]	
Firemen	[illegible]	
Superintendence	[illegible]	
Worthington high-duty pumping engine	[illegible]	
Barn expenses	[illegible]	
Care of grounds	[illegible]	
Labor on fuel	[illegible]	
Oil, waste, and packing	[illegible]	
Real estate	[illegible]	
Cornish pumping engine	[illegible]	
Lights	[illegible]	
Cornish engine house	[illegible]	
		[illegible]

SOCKANOSSET RESERVOIR

Watchman	[illegible]	
Sundries	[illegible]	
		[illegible]

HOPE PUMPING STATION

Firemen	[illegible]	
Engineers	[illegible]	
Sundries	[illegible]	
Lights	[illegible]	
Care of grounds	[illegible]	
Coal and wood	[illegible]	
Holly pumping engine	[illegible]	
		[illegible]

HOPE RESERVOIR

Watchman	[illegible]	
Sundries	[illegible]	
		[illegible]

FRUIT HILL RESERVOIR

Sundries	[illegible]	
Watchman	[illegible]	
		[illegible]

PIPE LINE AND SERVICE STOPS

Repairs	[illegible]	
Superintendence — salaries	[illegible]	
		[illegible]

Amount carried forward . . . . . [illegible]

Digitized by Google

Amount brought forward		$11,529 27
METER DEPARTMENT.		
Water meters	$3,956 23	
Setting and repairing meters	1,312 27	
		5,268 50
MISCELLANEOUS.		
Town of Cranston, tax	$6,228 37	
Clerks' and inspectors' salaries	1,470 78	
Prevention of defilement of the Pawtuxet	549 99	
Town of North Providence, tax	400 00	
Barn expenses	310 07	
Sundries	91 93	
Pipe yard, office expenses	67 24	
Real estate at Pawtuxet	58 50	
Horses, wagons, harnesses, etc	56 66	
Public drinking fountains and troughs	47 35	
Thawing services	94	
		9,281 83
		$26,079 60

The amount of expenditures from October 1 to December 31, 1898, inclusive, was $33,047 77

The total expenditures to December 31, 1898, inclusive, were $8,763,939 76

The *net* expenditure for construction and extension from October 1 to December 31, 1898, inclusive, was	$4,992 14
The *net* expenditure for construction and extension to December 31, 1898, inclusive, was	$6,417,699 33
The *net* expenditure for maintenance from October 1 to December 31, 1898, inclusive, was	$20,480 10
The *net* expenditure for maintenance to December 31, 1898, inclusive, was	$1,478,155 32

The value of the water works system, January 1, 1898, as estimated by the city engineer, was as follows:

Pettaconset pumping station	$340,694 00	
Hope pumping station	143,784 15	
Sockanosset, Hope, and Fruit Hill reservoirs	751,629 00	
Main lines and distribution pipes	2,764,100 98	
Real estate in Pawtuxet and Lincoln	15,975 00	
Tools and supplies	31,866 70	
		$4,048,049 83

Digitized by Google

Bills deposited with the city treasurer for collection from October 1 to December 31, 1898, inclusive, amounted to . $56,762 39

As follows:

Water	$48,978 18
Water meters	3,738 75
Setting and repairing meters	1,719 85
Repairs on pipe line	189 95
Rent of real estate	186 70
Permanently closing service stops	60 00
Penalties	20 00
Material and labor, laying service pipes, etc	1,858 52
Old rubber boots and rope	10 44
	$56,762 39

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for to the amount of $58,400 59

As follows:

Water	$50,805 06
Water meters	3,680 50
Setting and repairing meters	1,595 75
Rent of real estate	171 30
Repairs on pipe line	101 95
Permanently closing service stops	50 00
Penalties	20 00
Labor and material, laying service pipes, etc	1,965 59
Old rubber boots and rope	10 44
	$58,400 59

SEWERS.

During the quarter ending December 31, 1898, three hundred and twenty-three permits were issued to drain layers — one hundred and fifty-two for new work, and one hundred and seventy-one for extension and repairs of drains.

Digitized by Google

Two drain layers' licenses were issued during the quarter, making the total number fifty-two, all of which expired December 31, 1898.

November 5th, the proposal of William H. Sherman to lay drains to curb line in King street, from Manton avenue to Sheridan street, for the sum of fifty cents per linear foot, was accepted.

December 27th, the proposal of W. A. H. Grant to furnish and deliver vitrified sewer pipe for 80⅛ per cent. discount from list price, was accepted.

December 28th, the proposal of Charles M. Kelly to furnish and deliver upon the work the cement needed by the Department of Public Works during the year 1899, was accepted and a contract subsequently executed.

SEWERS CONSTRUCTED TO DECEMBER 31, 1898, IN MILES.

ITEMS.	KIND.	Built previous to 1898.	Built during 1898.	Total to Dec. 31, 1898.
Under regular appropriation	Brick.	32.783	.313	33.096
Under regular appropriation	Pipe.	109.894	2.317	112.211
Under improved sewerage appropriation	Brick and pipe.	22.612	.985	23.597
Total miles of sewers		165.289	3.615	168.904

During the year, seventy-four catch-basins, seventy-one extra inlets, and 138 manholes, have been built, making a

Digitized by Google

total to December 31, 1898, of 4,030 catch-basins, 1,127 extra inlets, and 7,196 manholes.

October 15th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

TO FREDERICK E. SHAW.

No. of resolution.	Date of approval.		
357.	Sept. 26, 1898,	*Brayton avenue and across land of the N. Y., N. H. and H. R. R. Co.,* .	$4,981 00
358.	" " "	*West Exchange and Gaspee streets,* . .	7,497 50

During the quarter, the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion
190.	May 20, 1898,	*Mill street, east side, from North Main to Bark,* . .	Dec. 5, 1898.
202.	" " "	*Section 23, Woonasquatucket Division, Improved Sewerage System,* . .	Dec. 31, 1898.
211.	June 10, "	*Parnell street, from its northerly termination to Atwells avenue,*	Dec. 22, 1898.
309.	Aug. 5, "	*Back and Lock streets,*	Oct. 4, 1898.
354.	Sept. 23, "	*Lester street, from Gilmore to Bridgham,*	Oct. 18, 1898.

Digitized by Google

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
406.	July 15, 1889,	*Section 2, Sewage Precipitation Tanks, Improved Sewerage System.*
572.	Dec. 20, 1895,	*Section 21, Moshassuck Division, Improved Sewerage System.*
572.	" " "	*Section 22, Moshassuck Division, Improved Sewerage System.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.	
260.	July, 8, 1898,	*Manton avenue, from Erastus street to King, and from Sisson to Unit.*
261.	" " "	*Plainfield street and Olneyville square.*
357.	Sept. 26, "	*Brayton avenue and across land of the N. Y., N. H. and H. R. R. Co.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced December 31, 1898, namely:

No. of resolution.	Date of approval.	
358.	Sept. 26, 1898,	*West Exchange and Gaspee streets.*
443.	Dec. 21, "	*Angell street and Blackstone park.*

Digitized by Google

SEWER MAINTENANCE DEPARTMENT.

The following table shows the work performed by the department cleaning sewers, basins, and drains, for the year 1898:

Months.	Old Work.									New Work.									
	Old Drains.			Sand Catchers.		Open Ditches.			Sewers.					Catch Basins.			[illegible]
	Number.	Length in feet.	Deposit removed cu. yds.	Number.	Deposit removed cu. yds.	Number.	Length in feet.	Deposit removed cu. yds.	Number.	Deposit removed cu. yds.	Number.	Length in feet.	Deposit removed cu. yds.	Number.	Number.	Deposit removed cu. yds.	[illegible]
January	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	2,000	[illegible]	1	[illegible]	[illegible]	[illegible]
February	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
March	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
April	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	1,000	[illegible]	6	[illegible]	[illegible]	[illegible]
May	1	[illegible]	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	1	[illegible]	1	[illegible]	[illegible]	1	1,000	1,000	1,000
June	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	6,000	[illegible]	6	[illegible]	[illegible]	[illegible]
July	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	1	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]
August	1	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]
September	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
October	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
November	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
December	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Totals	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Digitized by Google

In addition to the above form, the following work has been performed by this department during the year 1898:

Work on Sewers.

Examined all sewers for condition and deposit. Examined 120 sewers for roots, using rods and candle-boats, from twenty-eight of which roots were removed. Repaired thirty-two sewers; reset 445 manhole frames; replaced fifty-nine manhole covers and twenty-five frames, and put 200 pans in manhole frames under covers. Examined all sumps for deposit eight times, all gates and slots fifty-one times, and all screens, etc., six times. Repaired sixty-four holes over sewers, and two house connections; built one storm sewer 192.75 feet long, and five chutes. Cleaned screen at east gate-house fifty-one times. Replaced ten track grates and two track frames. Put in one 12-inch by 6-inch Y branch, and one 6-inch by 8-inch branch in sewer. Flushed five slots; carted 216 loads of sand; removed obstructions from one sewer, and put tide-gate in one. Connected pond with sewer; reduced all slots at main sewers, and disconnected all drinking fountains.

Work on Basins.

Removed snow from 6,410 basin inlets. Repaired thirty basins, seventy-nine holes at basins, three basin connections, and one outlet to basin. Flushed 777 chutes, 1,344 basin traps, and the pipe in six basins. Connected one basin with the sewer; reset eight basin traps, eleven basin sills, and one basin head. Removed roots from two basin pipes; replaced two basin covers and one basin sill; thawed out sixty-four chutes, repaired two and rebuilt one, and recut rabbets for twenty-two basin covers.

Old Work.

Connected nine basins with tidal drain and five with river. Repaired nine old drains, three wooden ones, and the outlets to two others. Leveled dump five times. Examined eight old drains, repaired one hole over old drain, and three fences at old drain outlets. Built seventeen chutes to connect with tidal drain, and seven chutes and two pot-holes to connect with old culverts on Hartford avenue. Located two old drains.

Miscellaneous.

Flushed seventy-one private drains, charged $175.35; pumped out twenty-six cellars, $155.48; pumped out Columbia theatre, $25.00; put in ten track grates for Union Railroad Company, $46.30; pumped out two cisterns, $8.10; flushed one sewer, $4.25; flushed one street, $1.75; repaired one sewer, $86.85; put in connection at Narragansett hotel, $94.36, cleaned out Moshassuck river, $110.87; altered manholes for Union Railroad Company, $104.59; altered basins, etc., for Narragansett Electric Lighting Company, $30.81.

Water Construction.

Carted pipe, etc., to Pettaconset Station five times; repaired three basin pipes on Columbia avenue.

Digitized by Google

Water Maintenance.

Removed ashes from Hope station six times; reset three gate boxes; repairs at Hope station five times; seeded and pounded banks at Hope reservoir, Sockanosset reservoir, and Pettaconset pumping station; connected horse drinking trough with sewer.

Sewer Construction.

Built one storm sewer, 190.99 feet long, twenty-five chutes, twenty-one basins, and two manholes. Put in connection from sewer to curb, twenty-one feet; connected pond with sewer, sixty-eight feet; disconnected three basins and rebuilt one.

Improved Sewerage System.

Drove test-wells, sodded and graded, pumped for filter plant, and painted buildings at brick station. Built three basins on King street, and one wooden chute at brick station.

Highways.

Built four chutes for surface drainage, and one wooden chute for same. Extended one surface drain.

Health Department.

Extinguished fire on Bowdoin street.

Contingencies.

Removed drinking fountain.

The amount of bills approved on account of sewers from October 1 to December 31, 1898, inclusive, was as follows:

For Construction.

Regular appropriation	$17,652 91	
Improved sewerage appropriation	70,448 05	
		$88,100 96

Charged as follows:

Material	$5,531 45
Salaries of assistant engineers	2,012 63
Contract reservations	1,037 00
Additional catch-basins	673 14
Testing cement	343 16
Sundries	304 62
Patterns for sewer castings	181 25
Sundries, improved sewerage system	23 88
Tools	6 36
Amount carried forward	$10,113 49

Digitized by Google

Amount brought forward	$10,113 49
Sewer in Back and Lock streets	30 05
Sewer in Brayton avenue and across land of New York, New Haven and Hartford Railroad Company	4,842 15
Sewer in Broad and Rugby streets	563 75
Sewer in Lester street, from Gilmore to Bridgham	496 61
Sewer in Manton avenue, from Erastus street to King	932 57
Sewer in Mill street, east side, from North Main to Bark	463 54
Sewer in Parnell street, from its northerly termination to Atwells avenue	2,296 00
Sewer in Plainfield street and Olneyville square	4,351 53
Sewer in Slocum street, from near Almy to Harkness	323 99
Culvert across Allens avenue at Old Maids cove	165 25
Grading grounds at Ernest street station	379 17
Sewer in Manton avenue and King street	487 85
Sewer in Moshassuck Division, Section 20	1,053 84
Sewer in Moshassuck Division, Section 21	18,346 09
Sewer in Moshassuck Division, Section 22	16,153 10
Sewer in Woonasquatucket Division, Section 23	6,059 40
Sewage precipitation tanks	21,042 58
	$88,100 96

For maintenance, ... $15,355 47

Charged as follows:

Cleaning basins and sewers	$3,893 54
Repairing basins and sewers	3,412 03
Cleaning and repairing old drains	1,909 86
Inspection of connections	681 96
Storm sewer in Benefit and Star streets	553 30
Salary — superintendent	446 86
Barn expenses	414 32
Sundries	347 20
Tools	337 60
Horses, wagons, harnesses, etc	107 39
Office expenses	54 10
Cleaning private connections	35 80
Filling cisterns, etc	13 88
ERNEST STREET STATION.	
Coal and wood	736 50
Engineers	732 57
Cleaning screens	545 15
Amount carried forward	$14,222 06

Digitized by Google

Amount brought forward	$14,222 06	
Firemen	392 75	
Cleaning and repairing pumps	300 73	
Supplies	281 99	
Care of grounds	82 83	
Lights	38 92	
Repairs on engines	27 76	
Care of buildings	8 03	
Repairs on boilers	40	
	$15,355 47	

The *net* expenditure for construction of sewers to December 31, 1898, inclusive, was $6,296,234 68

The *net* expenditure for maintenance of sewers to December 31, 1898, inclusive, was $614,470 71

Bills deposited with the city treasurer for collection from October 1 to December 31, 1898, inclusive, amounted to . $344 60

As follows:

Miscellaneous work for Union Railroad Company	$280 31
Cleaning private connections	46 35
Repairs on sewers	7 25
Old manhole frames and covers	6 64
Sewer material	4 05
	$344 60

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $278 00

As follows:

Repairs on sewers	$107 58
Miscellaneous work for Union Railroad Company	90 63
Cleaning private connections	44 10
Filling cisterns, etc	25 00
Old manhole frames and covers	6 64
Sewer material	4 05
	$278 00

Digitized by Google

HIGHWAYS.

Two permits to open streets were issued during the quarter.

November 19th, the proposal of James H. Tower to build an iron fence on the river wall at Canal street, from Smith to Mill, for the sum of $1.49 per linear foot, was accepted.

November 23d, the proposal of Gates Iron Works to furnish and erect a No. 3 Gates crusher, with pulleys, shafting, belting, chutes, etc., complete, for the sum of $1,500.00, was accepted.

December 22d, the proposal of Crabtree & Havey, of North Sullivan, Maine, to furnish and deliver straight granite curbing for the sum of forty-six cents per linear foot, was accepted.

December 29th, the proposal of Smithfield Granite Company to furnish two hundred and seventy-five bound-stones for the sum of one dollar each, was accepted.

1,285 notices to build or repair sidewalks were served upon the abutting owners during the year 1898:

The work, including 240 brought over from the preceding year, was done as follows:

By the abutting owners	1,088
By the city, at the expense of the abutting owners	247
Time for doing the work extended	20
Work not done	170

December 31, 1898, the total length of received streets was 223.45 miles.

148.55 miles of streets were curbed and built with gravel or broken stone.

30.22 miles of streets were built with gravel or broken stone, but not curbed.

Digitized by Google

39.20 miles of streets were paved, as follows:

Granite blocks	29.37 miles.
Cobble stones	5.08 miles.
Brick	.46 miles.
Trinidad asphalt	3.82 miles.
Vulcanite	.47 miles.

In addition to the general patching necessary to maintain the streets in good repair, the following work has been done during the year ending December 31, 1898, namely:

New streets built	4,025 linear feet.
Curbing set	7,946 linear feet.
Streets rebuilt	1,300 linear feet.
Streets resurfaced	171,700 linear feet.
Streets graded	4,400 linear feet.
Block pavement laid	10,671 square yards.
Asphalt pavement	8,684 square yards.
Cobble pavement relaid	1,300 square yards.
Block paving relaid	11,364 square yards.
Brick paving relaid	100 square yards.
Concrete gutters and roadways built	2,081 square yards.
Asphalt gutters and roadways built	348 square yards.
Concrete sidewalks laid	10,317 square yards.
Concrete sidewalks patched and top-dressed	5,094 square yards.
Crushed stone used	46,059 tons.
Screened gravel used	9,511 cubic yards.

During the year the following streets, aggregating 32.5 miles, have been resurfaced, namely:

Abbott street, from North Main to Knowles.
Adelaide avenue, from Broad street to Elmwood avenue.
Admiral street, from Swan avenue to River.
Almy street, from Broadway to Westminster street.
America street, from Broadway to Atwells avenue.
Angell street, from Prospect to Wayland avenue.
Arthur avenue, from Atwells to Federal street.
Atwells avenue, from Aborn street to Knight.
Audrey street, from Delaine to Appleton.
Baker street, from Broad to Eddy.
Balch street, from Jackson avenue to Hamburg.
Bassett street, from Hospital to Plain.
Bates street, from Mallett to Riley.
Blackstone boulevard, from Irving avenue to East.
Bowen street, from Benefit to North Main.
Bowen street, from Prospect to Hope.
Bradford street, from Atwells avenue to Cedar street.

Digitized by Google

Branch avenue, from Thurbers lane to West River street.
Brayton avenue, from Spruce street to the railroad.
Broad street, at Trinity square.
Broad street, from Trinity square to Mitchell street.
Broad street, from Miller avenue to city line.
Brook street, from Power to Hope.
Cady street, from Benefit to North Main.
Camp street, from Cypress to Pleasant.
Chaffee street, from Manton avenue to Appleton street.
Chalkstone avenue, from Charles street to North Davis.
Chapin avenue, from Messer street to Sycamore.
Charles street, from Admiral to Silver Spring.
Chestnut street from Point to Bassett.
Church street, from Benefit to North Main.
Clifford street, from Chestnut to Plain.
College street, from Benefit to South Main.
Common street, from Washburn to Smith.
Congdon street, from Angell to Jenckes.
Corliss street, from Livingstone avenue to Dart street.
Cross street, from Corliss to West River.
Cushing street, from Prospect to Hope.
Cypress street, from Morris avenue to Cole.
Davis street, from Smith to Orms.
Dean street, from Westminster to Washington.
Dexter street, from Potters avenue to Cromwell street.
Diman place, from Angell street to Stimson avenue.
Douglas avenue, from Eaton street to Branch avenue.
Dudley street, from Friendship to Prairie avenue.
Duncan avenue, from North Main street to Knowles.
East River street, from South Angell to Waterman.
Elm street, from Eddy to Plain.
Elmwood avenue, from Trinity square to railroad bridge.
Euclid avenue, from Thayer street to Brook.
Fenner avenue, from Cranston street to Reservoir avenue.
Francis street, from Gaspee to Smith.
Governer street, from Wickenden to Pitman.
Grandview street, from North Main 500 feet easterly.
Hammond street, from Westminster to Cranston.
Harkness street, from Broadway to Westminster.
Hartford avenue, from Olneyville square to city line.
Harrison street, from Westminster to Cranston.
Hayward street, from Lockwood to Broad.
Hopkins street, from Benefit to South Main.
Hospital street, from Point to Eddy.
Huntington avenue, from Westminster street to Union avenue.
Hyatt street, from Amherst to Manton avenue.
Irving avenue, from Arlington to Taber.
Jackson avenue, from Burrington street to Balch.
James street, from Benefit to South Main.
Jenkins street, from Camp to North Main.
Julian street, from Amherst to Manton avenue.

Digitized by Google

Keene street, from Prospect to Thayer.
Knowles street, from Cypress to Abbott.
Knowles street, from Jenkins to Pleasant.
Lester street, from Gilmore to Bridgham.
Livingstone street, from North Main to West River.
Lloyd street, from Prospect to Thayer.
Lockwood street, from Broad to Prairie avenue.
Mallett street, from Olney to Bates.
Manton avenue, from Florence street to Amherst.
Mathew street, from Fillmore to its terminus.
Messer street, from Cranston to Westminster.
Meeting street, from Prospect to Hope.
North Court street, from Benefit to North Main.
Olive street, from Prospect to Thayer.
Olney street, from Camp to East avenue.
Parsonage street, from Point to Elm.
Pawtucket avenue, from Grandview street to Cemetery.
Pearl street, from Cranston to Prairie avenue.
Plain street, from Friendship to Point.
Plainfield street, from end of blocking to city line.
Planet street, from Benefit to South Main.
Pocasset avenue, from Webster to city line.
Pontiac road, from Reservoir avenue to city line.
Potters avenue, from Broad street to Gordon avenue.
Printery street, from Randall 200 feet northerly.
Public street, from Allens avenue to Eddy street.
Putnam street, from Atwells avenue to Appleton street.
Rochambeau avenue, from Camp street to North Main.
Sayles street, from Ocean to Rugby.
Slocum street, from Almy to Harkness.
Smith street, from Francis to Common.
Smithfield avenue, from Batcheller to city line.
Somerset street, from Broad to Friendship.
South street, from Eddy to Plain.
South Court street, from Benefit to Congdon.
Star street, from Benefit to North Main.
State street, from Smith to Orms.
Summer street, from Point to Broad.
Taber avenue, from Angell street to Irving avenue.
Thayer street, from Waterman to Barnes.
Transit street, from Benefit to South Main.
Walling street, from West River to Pettis.
Washburn street, from Orms to Smith.
Waterman street, from Prospect to East River.
West Exchange street, from Aborn to Atwells avenue.
West Friendship street, from Broad to Elmwood avenue.
West River street, from Dart to Wilcox.
Wickenden street, from East to Gano.
Williams street, from Benefit to South Main.
Wood street, from Messer to Parade.

Digitized by Google

.833 + miles of streets have been graded during the year, namely:

Columbia avenue, from Broad street westerly.
Euclid avenue, from Thayer street to Brook.
King street, from Sawin avenue to Sheridan street.
Power street, from Gano to Ives.
Roger street, from Power to Williams.

1.304 + miles of streets have been repaved during the year, namely:

Academy avenue, from Andem street to Roanoke.
Cranston street, from Althea to Fenner avenue.
Dorrance street, from Weybosset to Dyer.
Dyer street, from Pine to Westminster.
Harris avenue, from Hemlock street 200 feet westerly.
Hartford avenue, from Olneyville square 200 feet westerly.
Manton avenue, from Delaine street to Chaffee.
North Main street, from Doyle avenue to Bacon street.
Plainfield street, from Olneyville square to railroad crossing.
Point street, from Chestnut to Point street bridge.
Randall street, from Printery to North Main.
Ship street, from Eddy to Clifford.
South Water street, from Bridge to India.

.246 + miles of streets have been rebuilt during the year, namely:

Sprague street, from Elmwood avenue to Dexter street.
Star street, from Benefit to North Main.

During the quarter, the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Nov. 18, 1897,	*Whitmarsh street, from Updike to Elmwood avenue.*
Dec. 16, "	*Lexington avenue, from Hamilton street to Broad.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Francis street, from Cove and Exchange place to Gaspee street.*

Digitized by Google

To Pave with Trinidad Asphalt.

No. of resolution.	Date of approval.	
322.	July 13, 1897,	*Approaches to new passenger station.*

To Build and Curb.

350.	Sept. 23, 1898,	*Whitmarsh street, from Updike to Elmwood avenue.*

The following work was in progress December 31, 1898, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
May 16, 1895,	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — three-fourths completed.
Sept. 15, 1898,	*Canal street extension and Mill street:* — one-half completed.
Oct. 20, "	*King street, from Manton avenue to Sheridan street:* — curbing partially set.

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
151.	April 5, 1895,	*Promenade street, from present end of pavement near railroad bridge to Steeple street:* — one-half completed.

To Build.

257.	July 8, 1898,	*Exchange place and West Exchange street:* — curbing set.

To Remove Building and Grade.

320.	Sept. 13, 1898,	*Old passenger station, Exchange place and adjoining lands:* — nearly completed.

Digitized by Google

To Build and Curb.

No. of resolution.	Date of approval.	
350.	Sept. 23, 1898,	*Lexington avenue, from Hamilton street to Broad:* — gutters to be concreted.

To Build Iron Fence.

364.	Oct. 6, 1898,	*Approaches to the new passenger station.*

To Pave with Asphalt.

353.	Sept. 23, 1898,	*Washington street extension, from West Exchange to near Exchange bridge:* — in process.

The following work, ordered by the board of aldermen and city council, had not commenced December 31, 1898, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Dec. 16, 1897,	*Arlington avenue, east side, from Irving to University.*
" " "	*Ayrault street, from Valley to Chalkstone avenue.*
" " "	*Black street, from Orms to Chalkstone avenue.*
" " "	*Foster street, from Broad to Pine.*
" " "	*Wayne street, from Nolan to Candace.*
" " "	*West Park street, from Holden to Senter.*
June 16, 1898,	*Arlington avenue, east side, from University to Lloyd.*
" " "	*Columbia avenue, from Broad street to Roger Williams Park.*
Sept. 15, "	*Power street, from Governor to Ives.*
" " "	*Irving street, from Emerson to Broad.*
Oct. 20, "	*Doyle avenue, from Morris to Elmgrove.*

Digitized by Google

Date of order.	
Dec. 15, 1898,	*Huntington avenue, from Carter street to Jackson avenue.*
" " "	*Wayland avenue, from Elton street to Irving avenue.*

To Put in Good Condition.

Sept. 16, 1897,	*Irving avenue, from Grotto to its easterly termination.*

To Take Possession.

Dec. 15, 1898,	*Charles street, from Lock to Randall square.*

To Build and Curb.

No. of resolution.	Date of approval.	
350.	Sept. 23, 1898,	*Arlington avenue, east side, from Irving to University.*
350.	" " "	*Ayrault street, from Valley to Chalkstone avenue.*
350.	" " "	*Black street, from Orms to Chalkstone avenue.*
350.	" " "	*Wayne street, from Nolan to Candace.*
350.	" " "	*West Park street, from Holden to Senter.*
350.	" " "	*Arlington avenue, east side, from University to Lloyd.*
350.	" " "	*Columbia avenue, from Broad street to Roger Williams Park.*

To Pave with Granite Blocks.

351. Sept. 23, 1898,	*Canal street extension and Mill street.*

To Pave with Asphalt.

352. Sept. 23, 1898,	*Mathewson street, from Westminster to Weybosset.*

Digitized by Google

To Grade, when Union Railroad Company is Authorized to Extend its Rails.

No. of resolution. Date of approval.

455. Dec. 30, 1898, *Douglas avenue, from Chad Brown street to Admiral.*

To Buy and Set Stone Bounds.

478. Jan. 2, 1899, *New boundary line between the City of Providence and the Town of Johnston.*

Bills approved on account of highways from October 1 to December 31, 1898, inclusive, amounted to:

Regular appropriation	$89,114 13	
Special appropriation	16,405 66	
Special credit appropriation	300 90	
		$105,820 69

Classified as follows:

Crushed stone--material and labor	$30,322 45	
Repairs on unpaved streets	15,657 37	
Cleaning streets	12,928 94	
Removing snow and ice	10,243 83	
Barn expenses	2,834 95	
Blacksmith and wheelwright shop	2,582 47	
Stone — paving and crosswalk	2,196 49	
Repairs on stone crushers	1,341 32	
Steam rollers — repairs and supplies	1,253 34	
Repairs on paved streets	890 18	
Tools, implements, etc	798 64	
Labor on material	789 13	
Salary — superintendent	446 86	
Horses, wagons, harnesses, etc	219 94	
Building driveways, etc.	201 23	
Watchman at city yard	157 71	
Sundries	83 50	
Office expenses—city yard	61 05	
Fencing streets—material and labor	29 66	
Watering streets	25 00	
		$83,064 06
Amount carried forward		$83,064 06

Digitized by Google

Amount brought forward.....		$83,064 06

NEW WORK — BUILDING AND REBUILDING STREETS, ETC.

SIDEWALKS CURBED AND GUTTERS PAVED.

Irving avenue, from Taber to Blackstone boulevard	$190 77	
King street, from Manton avenue to Sheridan street.....	1,209 73	
Lexington avenue, from Hamilton street to Broad ..	1,785 32	
Power street, from Ives to Gano.....	110 13	
Whitmarsh street, from Updike to Elmwood avenue.	939 80	
		4,235 75

PAVE WITH GRANITE BLOCKS.

Canal and Mill streets.....	$1,756 14	
Francis street, from Cove and Exchange place to Gaspee street	5,147 65	
Promenade street, from present end of pavement near railroad bridge to Steeple street.....	83 56	
		6,987 35

PAVE WITH TRINIDAD ASPHALT.

The two approaches to the proposed depot in Exchange place.....	$11,174 45	
The extension of Washington street, from West Exchange to near Exchange bridge.....	359 08	
		11,533 53
		$105,820 69

Bills deposited with the city treasurer for collection from October 1 to December 31, 1898, inclusive, amounted to $4,439 44

As follows:

Labor and material.....	$2,972 98
Union Railroad Company, for granite blocks, etc...	944 20
Boarding horses for other departments.....	269 19
Use of steam roller	87 32
Manure from barn.....	72 00
Street sweepings,.....	69 00
Removing trees.....	24 75
	$4,439 44

Digitized by Google

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of . . . $4,197 64

As follows:

Labor and material	$2,483 48
Union Railroad Company, for granite blocks, etc.	944 20
Blacksmith and harness work for other departments	331 27
Boarding horses for other departments	269 19
Manure from barn	72 00
Street sweepings	69 00
Removing trees	24 75
Use of hoisting engine	3 75
	$4,197 64

SIDEWALKS AND CURBING.

Bills approved on account of sidewalks and curbing from October 1 to December 31, 1898, inclusive, amounted to $4,122 76

Charged as follows:

Concreting sidewalks	$3,701 55
Iron fence on approaches to new passenger station.	421 21
	$4,122 76

Bills deposited with the city treasurer for collection (for curbing sold), from October 1 to December 31, 1898, inclusive, amounted to . $166 75

During the quarter, coupons from bills collected (for curbing sold), have been returned by the city treasurer and receipted for, to the amount of $197 25

Digitized by Google

CITY ENGINEER.

Bills approved on account of the city engineer's department, from October 1 to December 31, 1898, inclusive, amounted to . . . $12,539 70

Charged as follows:

Salary—city engineer	$1,125 00
Salaries of assistants	10,115 01
Salaries of clerks	772 15
Supplies—drawing material, etc	243 81
Car fares	210 39
Instruments and repairs	52 50
Sundries	18 09
Carriage hire	2 75
	$12,539 70

Bills deposited with the city treasurer for collection from October 1 to December 31, 1898, inclusive, amounted to $1 42

As follows:

Steel tapes	$1 10
Tracing-cloth	32
	$1 42

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of $1 42

As follows:

Steel tapes	$1 10
Tracing-cloth	32
	$1 42

Digitized by Google

BRIDGES.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
158.	April 20, 1897,	*Weybosset bridge and river walls.*
187.	May 20, 1898,	*Weybosset bridge extension.*

Bills approved on account of bridges from October 1 to December 31, 1898, inclusive, amounted to $9,533 94

Charged as follows:

Barn expenses	$104 18
Branch avenue bridge	1 50
Building at city yard	14 46
Burnside bridge	9 74
Eagle street bridge	2 09
Horses, wagons, harnesses, etc	23 75
Lumber, hardware, etc	837 35
Point street bridge	4,532 57
Randall street bridge	65
Red bridge	198 54
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	1,003 00
Salaries—Red bridge	534 50
Salaries—Washington bridge	522 99
Sundries	208 58
Tools	44 13
Washington bridge	1,446 26
Washington row bridge	18 25
Weybosset bridge	1 40
	$9,533 94

Bills deposited with the city treasurer for collection from October 1 to December 31, 1898, inclusive, amounted to $1,212 64

Digitized by Google

As follows:

New York, New Haven and Hartford Railroad Company, for granite blocks, etc.	$1,185 00
Metallic fastening for electric light pole on Weybosset bridge	27 14
Old lumber	50
	$1,212 64

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, to the amount of . . . $41 80

As follows:

Metallic fastening for electric light pole on Weybosset bridge	$27 14
Cement barrels	14 16
Old lumber	50
	$41 80

Bills approved for account of rebuilding the Weybosset bridge and river walls, from October 1 to December 31, 1898, inclusive, have been paid from the special appropriation for that work, to the amount of $24,530 52

PUBLIC WORKS OFFICE.

Bills approved on account of the public works office, from October 1 to December 31, 1898, inclusive, amounted to $5,096 37

Charged as follows:

Salaries of commissioner and secretary	$1,925 00
Salaries of office assistants	3,073 47
Office supplies	97 90
	$5,096 37

Digitized by Google

CONTINGENCIES.

Bills approved from October 1 to December 31, 1898, inclusive, for account of removing the old passenger station and grading the adjoining lands, have been paid from the appropriation for contingencies to the amount of $3,399 89

ROBERT E. SMITH,

Commissioner.

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google